

VDOİHİ

Bağımlı ve Bir Bağımsız Olasılıklı
Farklı Dizilimsiz Bağımlı Durumlu
Simetrisinin Herhangi İki Durumuna
Bağı Tek Kalan Düzgün Olmayan
Simetrik Olasılık

Cilt 2.3.3.3.4.1.1.8

İsmail YILMAZ

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VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin herhangi iki durumuna bağlı tek kalan düzgün olmayan simetrik olasılık Cilt 2.3.3.3.4.1.1.8

İsmail YILMAZ

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1. Bağımlı durumlu simetrisinin herhangi iki durumuna bağlı tek kalan düzgün olmayan simetrik olasılık

Dili: Türkçe + Matematik Mantık



K. Atatürk

Türkiye Cumhuriyeti Devleti
Kuruluşunun
100. Yılı Anısına

Yazar Hakkında

İsmail YILMAZ; Hamzabey Köyü, Yeniçağa, Bolu'da 1973 yılında doğdu. İlkokulu köyünde tamamladıktan sonra, ortaokulu Yeniçağa ortaokulunda tamamladı. Liseyi Ankara Ömer Seyfettin ve Gazi Çiftliği Liselerinde okudu. Lisans eğitimini Çukurova Üniversitesi Fen Edebiyat Fakültesi Fizik bölümünde, yüksek lisans eğitimini Sakarya Üniversitesi Fen Bilimleri Enstitüsü Fizik Anabilim Dalında ve doktora eğitimini Gazi Üniversitesi Eğitim Bilimleri Enstitüsü Fen Bilgisi Eğitimi Anabilim Dalında tamamladı. Fen Bilgisi Eğitiminde; Newton'un hareket yasaları, elektrik ve manyetizmanın prosedürel ve deklaratif bilgi yapılarıyla birlikte matematik mantık yapıları üzerine çalışmalar yapmıştır. Yazarın farklı alanlarda yapmış olduğu çalışmalar arasında ölçme ve değerlendirmeye yönelik çalışmaları da mevcuttur.

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Sanırım bilgi ve teknolojideki kaderimiz veriyle ilişkilendirilmiş.

İÇİNDEKİLER

| | |
|--|----|
| Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar | 1 |
| Simetriden Seçilen İki Duruma Göre Tek Kalan Düzgün Olmayan Simetrik Olasılıklar | 3 |
| Dizin | 12 |

GÜLDÜNYA

Simge ve Kısaltmalar

n : olay sayısı

n : bağımlı olay sayısı

m : bağımsız olay sayısı

l : bağımsız durum sayısı

L : simetrimin bağımsız durum sayısı

l : simetrimin bağımlı durumlarından önce bulunan bağımsız durum sayısı

L : simetrimin bağımlı durumlarından sonra bulunan bağımsız durum sayısı

k : simetrimin bağımlı durumları arasındaki bağımsız durumların sayısı

k : dağılımın başladığı bağımlı durumun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası

l : ilgilenilen bağımlı durumun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası

l : simetrimin ilk bağımlı durumunun, bağımlı olasılık farklı dizilimsiz dağılımın son olayı için sırası. Simetrimin sonuncu bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlardaki sırası

l_i : simetrimin son bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası. Simetrimin birinci bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlardaki sırası

l_s : simetrimin ilk bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz

dağılımlardaki sırası. Simetrimin sonuncu bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlardaki sırası

l_{ik} : simetrimin aranacağı durumdan önce bulunan bağımlı durumun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası veya simetrimin iki bağımlı durumu arasında bağımsız durum bulunduğunda, bağımsız durumdan önceki bağımlı durumun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası

l_{sa} : simetrimin aranacağı bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası. Simetrimin aranacağı bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlardaki sırası

j : son olaydan/(alt olay) ilk olaya doğru aranılan olayın sırası

j_i : simetrimin son bağımlı durumunun, bağımlı olasılıklı dağılımlarda bulunabileceği olayların, son olaydan itibaren sırası

j_{sa}^i : simetriyi oluşturan bağımlı durumlar arasında simetrimin son bağımlı durumunun bulunduğu olayın, simetrimin son olayından itibaren sırası ($j_{sa}^i = s$)

j_{ik} : simetrimin ikinci olayındaki durumun, gelebileceği olasılık dağılımlardaki olayın sırası (son olaydan ilk olaya doğru) veya simetride, simetrimin aranacağı durumdan önce bulunan bağımlı durumun, bağımlı olasılıklı dağılımlarda bulunabileceği olayların, son olaydan itibaren sırası veya simetrimin iki bağımlı

durum arasında bağımsız durumun bulunduğunda bağımsız durumdan önceki bağımlı durumun bağımlı olasılıklı dağılımlarda bulunabileceği olayların son olaydan itibaren sırası

j_{sa}^{ik} : j_{ik} 'da bulunan durumun simetriyi oluşturan bağımlı durumlar arasında bulunduğu olayın son olaydan itibaren sırası

$j_{x_{ik}}$: simetrinin ikinci olayındaki durumun, olasılık dağılımlarının son olaydan itibaren bulunabileceği olayın sırası

j_s : simetrinin ilk bağımlı durumunun, bağımlı olasılıklı dağılımlarda bulunabileceği olayların, son olaydan itibaren sırası

j_{sa}^s : simetriyi oluşturan bağımlı durumlar arasında simetrinin ilk bağımlı durumunun bulunduğu olayın, simetrinin son olayından itibaren sırası ($j_{sa}^s = 1$)

j_{sa} : simetriyi oluşturan bağımlı durumlar arasında simetrinin aranacağı durumun bulunduğu olayın, simetrinin son olayından itibaren sırası

j^{sa} : j_{sa} 'da bulunan durumun bağımlı olasılıklı dağılımda bulunduğu olayın son olaydan itibaren sırası

D : bağımlı durum sayısı

D_i : olayın durum sayısı

s : simetrinin bağımlı durum sayısı

s : simetrik durum sayısı. Simetrinin bağımlı ve bağımsız durum sayısı

m : olasılık

M : olasılık dağılım sayısı

U : uyum eşitliği

u : uyum derecesi

s_i : olasılık dağılımı

${}_{fz}S_{j_i}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin son durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

${}_{fz}S_{j_i,0}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

${}_{fz}S_{j_i,D}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

${}_{fz}^0S_{j_i}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu simetrinin son durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

${}_{fz}^0S_{j_i,0}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

${}_{fz}^0S_{j_i,D}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

$f_Z S_{j_s^{sa}}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin durumuna bağlı tek kalan simetrik olasılık

$f_Z S_{j_s^{sa},0}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin durumuna bağlı tek kalan simetrik olasılık

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$f_{Z,0} S_{j_s,j_i,0}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı

durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

$f_{Z,0} S_{j_s,j_i,D}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve son durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

${}^0 f_Z S_{j_s,j_i}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

${}^0 f_Z S_{j_s,j_i,0}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

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durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

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herhangi iki ve son durumuna bağlı tek kalan simetrik olasılık

$fz \overset{DSST}{S}_{j_i}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

$fz \overset{DSST}{S}_{j_i,0}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

$fz \overset{DSST}{S}_{j_i,D}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

${}^0 \overset{DSST}{fz \Rightarrow} j_i$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

${}^0 \overset{DSST}{fz \Rightarrow} j_i,0$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

${}^0 \overset{DSST}{fz \Rightarrow} j_i,D$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

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E2

BAĞIMLI ve BİR BAĞIMSIZ OLASILIKLI FARKLI DİZİLİMSİZ DAĞILIMLAR

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar

- Simetrik Olasılık
- Toplam Düzgün Simetrik Olasılık
- Toplam Düzgün Olmayan Simetrik Olasılık
- İlk Simetrik Olasılık
- İlk Düzgün Simetrik Olasılık
- İlk Düzgün Olmayan Simetrik Olasılık
- Tek Kalan Simetrik Olasılık
- Tek Kalan Düzgün Simetrik Olasılık
- Tek Kalan Düzgün Olmayan Simetrik Olasılık
- Kalan Simetrik Olasılık
- Kalan Düzgün Simetrik Olasılık
- Kalan Düzgün Olmayan Simetrik Olasılık

bu yüze sıralanmasıyla elde edilebilen kurallı tablolar kullanılmaktadır. Farklı dizilimsiz dağılımlarda durumların küçükten-büyükçe sıralama için verilen eşitliklerde kullanılan durum sayısının düzenlenmesiyle, büyükten-küçükçe sıralama durumlarının eşitlikleri elde edilebilir.

Farklı dizilimsiz dağılımlar, dağılımın ilk durumuyla başlayan (bunun yerine farklı dizilimsiz dağılımlarda simetriden seçilen ilk durumuyla başlayan dağılımlar), dağılımın ilk durumu hariçinde dağılımın herhangi bir durumuyla başlayan dağılımlar (bunun yerine farklı dizilimsiz dağılımlarda simetride bulunmayan bir durumla başlayan dağılımlar) ve dağılımın ilk durumu hariçinde ilk dağılımının başladığı farklı ikinci durumla başlayıp simetriden seçilen ilk durumuyla başlayan dağılımların sonuna kadar olan dağılımlarda (bunun yerine farklı dizilimsiz dağılımlarda simetride bulunmayan diğer durumlarla başlayan dağılımlar) simetrik, düzgün simetrik, düzgün olmayan simetrik v.d. incelenir. Bağımlı dağılımlardaki incelenen başlıklar, bağımlı ve bir bağımsız olasılıklı dağılımlarda, bağımsız durumla ve bağımlı durumla başlayan dağılımlar olarak da incelenir.

Bağımlı dağılım ve bir bağımsız olasılıklı durumla oluşturulabilen dağılımlara ve bağımlı olasılıklı dağılımların kendi olay sayısından (bağımlı olay sayısı) büyük olasılıklara (bağımsız olay sayısı) dağılımla bağımlı ve bir bağımsız olasılıklı dağılımlar elde edilir. Bağımlı dağılım farklı dizilimsiz dağılımlarda oluşturduğunda, bu dağılımlara bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlar elde edilir. Bağımlı ve bir bağımsız olasılıklı dağılımlar; bağımlı dağılımlara, bağımsız durumlar ilk durumdan dağıtılmaya başlanarak tabloları elde edilir. Bu bölümde verilen eşitlikler, bu yöntemle elde edilen kurallı tablolarla göre verilmektedir. Farklı dizilimsiz dağılımlarda durumların küçükten-

Bağımlı dağılımlar; a) olasılık dağılımlardaki simetrik, (toplam) düzgün simetrik ve (toplam) düzgün olmayan simetrik b) ilk simetrik, ilk düzgün simetrik ve ilk düzgün olmayan simetrik c) tek kalan simetrik, tek kalan düzgün simetrik ve tek kalan düzgün olmayan simetrik ve d) kalan simetrik, kalan düzgün simetrik ve kalan düzgün olmayan simetrik olasılıklar olarak incelendiğinden, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda bu başlıklarla incelenmekle birlikte, bu simetrik olasılıkların bağımsız durumla başlayan ve bağımlı durumlarıyla başlayan dağılımlara göre de tanım eşitlikleri verilmektedir.

Farklı dizilimsiz dağılımlarda simetrinin durumlarının olasılık dağılımındaki sırasına göre simetrik olasılıkları etkilediğinden, bu bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımları da etkiler. Bu nedenle bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda, simetrinin durumlarının bulunabileceği olaylara göre simetrik olasılık eşitlikleri, simetrinin durumlarının olasılık dağılımındaki sıralamalarına göre ayrı ayrı verilecektir. Bu eşitliklerin elde edilmesinde bağımlı olasılıklı farklı dizilimsiz dağılımlarda simetrinin durumlarının bulunabileceği olaylara göre çıkarılan eşitlikler kullanılmaktadır. Bu eşitlikler, bir bağımlı ve bir bağımsız olasılıklı dağılımlar için VDO'nun Çizim 1'de çıkarılan eşitliklerle birleştirilerek, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımların yeni eşitlikleri elde edilecektir. Eşitlikleri adlandırılmasında bağımlı olasılıklı farklı dizilimsiz dağılımlarda kullanılan adlandırmalar kullanılacaktır. Bu adların altına simetrinin bağımlı ve bağımsız durumlarına göre ve dağılımın bağımsız veya bağımlı durumla başlamasına göre "Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı/bağımsız-bağımlı/bağımlı-bir bağımsız/bağımlı-bağımsız/bağımsız-bağımsız/bağımsız-bağımsız durumlu/bağımsız/bağımlı" kelimeleri getirilerek, simetrinin bağımlı durumlarının bulunabileceği olaylara göre bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz adları elde edilecektir. Simetriden seçilen durumların bulunabileceği olaylara göre simetrik, düzgün simetrik veya düzgün olmayan simetrik olasılık için birden fazla ad kullanılması durumunda gerekmedikçe yeni tanımlama yapılmayacaktır.

Simetrinin durumlarının bağımlı olasılık farklı dizilimsiz dağılımlarındaki sırasına göre verilen eşitliklerdeki toplam sınıra sınır değerleri, simetrinin küçükten-büyük sıralanan dağılımlarına göre verildiğinden bu dağılımlarda da aynı sıralama kullanılmaya devam edilecektir. Bağımlı olasılıklı farklı dizilimsiz dağılımlarda olduğu gibi bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda da aynı eşitliklerde simetrinin durum sayıları düzenleneren büyüğe küçükçe sıralanan dağılımlar için de simetrik olasılık eşitlikleri elde edilecektir.

Bu şekilde bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumuyla başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımın aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin herhangi iki durumuna bağlı tek kalan düzgün olmayan simetrik olasılığın eşitlikleri verilmektedir.

SİMETRİDEN SEÇİLEN İKİ DURUMA GÖRE TEK KALAN DÜZGÜN OLMAYAN SİMETRİK OLASILIK

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee \end{aligned}$$

$$\begin{aligned} & (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \\ & j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee \end{aligned}$$

$$\begin{aligned} & (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \\ & j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee \end{aligned}$$

$$\begin{aligned} & D \geq n < n \wedge l = i \wedge l_s \geq 0 \wedge \\ & j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge \end{aligned}$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^t\}$$

$$s \geq 4, \mathbb{k}_z = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1 + 1 \Rightarrow$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq t \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee \end{aligned}$$

$$f_z^{S_{j_{ik}j_{sa}^{DOST}}} = 0$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{sa}}^{DOST} = \left(\sum_{k=l} \binom{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}{j_{ik} = j_{sa}^{ik} - j_{sa}} \sum_{j^{sa} = l_{sa} + n - D} \binom{n_i - j_{sa}^{ik} + k_1 + 1}{n_{ik} = n + k_2 - j_{ik} + 1} \sum_{n_{sa} = n - j_{sa} + 1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) + \left(\sum_{k=l} \binom{j^{sa} + j_{sa}^{ik} - j_{sa} - 1}{j_{ik} = l_{ik} + n - D} \sum_{j^{sa} = l_{sa} + n - D} \right)$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

GÜLDÜŞÜKÜ

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} j^{sa}=l_i+n+j_{sa}-D-s$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{sa}}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}_2}}$$

$$\frac{(n_i-j_s+1)! \cdot (n_i-j_s)!}{(n-l)! \cdot (n-s)!} \cdot \frac{(l_s-l)!}{(l_s+j_{sa}-j_{sa}^{ik}-1)! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \frac{(D-l)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} - 1 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge (l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} - 1 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge (l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j^{sa}}} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa} - 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s - 1)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

GÜLDÜZÜMÜYA

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - j_{sa}^i \wedge j_{sa}^i \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_{z=2}^{ST} j_{ik}, j_{sa} = \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left(\sum_{k=l}^{l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1} \sum_{(j_{ik} = l_{ik} + n - D)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}^{n_{sa} - j_{sa} - 1} \right. \\
 & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{n_{sa} - j_{sa} - 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}
 \end{aligned}$$

GÜLDÜZYAN

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \\
& \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D, \dots, j_{sa}=j_{ik}+j_{sa}-j_{sa})} \sum_{(j_{sa}=j_{sa}+1)} \\
& \sum_{(n_i=n+l_k, \dots, n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - l_i + 1 \wedge$$

$$2 \leq l \leq D + l_i + j_{sa}^{ik} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - l_{sa} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_s+j_{sa}-l} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\left. \frac{(D + j_{sa} - n - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left(\sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_s+j_{sa}-l} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\left. \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right)$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l + j_{sa} - l + 1}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \sum_{k=l}^{(j_{sa} - l_{sa} - s)} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(j_{sa} - l_{sa} - s)} \sum_{(l_i = n + j_{sa} - D - k)}^{(j_{sa} - l_{sa} - s)} \sum_{(n_i = n + k + j_{sa}^{ik} - j_{ik})}^{(j_{sa} - l_{sa} - s)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{(j_{sa} - l_{sa} - s)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n - n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_i - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l} \sum_{\substack{(l_s + j_{sa}^{ik} - l) \\ (j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}} \sum_{\substack{l_{sa} - l + 1 \\ j_{sa} = l_{sa} + n - D}} \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{\substack{(n_i - j_{ik} - \mathbb{k}_1 + 1) \\ (n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}} \sum_{\substack{n_{ik} + j_{ik} - j_{sa} \\ n_{sa} - j_{sa} + 1}} \\
 &\frac{(n_i - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik})! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 &\frac{(l_{ik} - l + j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(l_{ik} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
 &\sum_{k=l} \sum_{\substack{(l_s + j_{sa}^{ik} - l) \\ (j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}} \sum_{\substack{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}} \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{\substack{(n_i - j_s + 1) \\ (n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}} \\
 &\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - \mathbb{k}_1} \sum_{\substack{() \\ (n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}} \\
 &\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{sDOST} = \sum_{k=l}^{(l_s + j_{sa} - l)} \sum_{j_{ik}=j_{sa} - D - j_{sa}}^{(l_s + j_{sa} - l)} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}}^{(l_s + j_{sa} - l)} \sum_{n_i=n+k}^n \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j^{sa} = i + j_{sa} - j_{sa}^{ik} \sum_{n_i = n + k}^n \sum_{(n_{is} = n_i - k)}^{(n_i - k + 1)} \sum_{(n_{ij} = n_{is} + j_{sa}^{ik} - k - k_1)}^{(n_i - k + 1)} \sum_{(j_{sa} = l_{sa} - k_2)}^{(n_i - k + 1)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(j_{sa} - l - 1)!}{(j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - j_{sa}^{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge k = k \geq 1 \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \leq n - s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\dots)} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})}^{(\dots)} \sum_{j_{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_s - l - j_{sa} - s)!}{(l_s + j_{sa} - n - 1)! \cdot (n - l_s - j_{sa} - s)!} \cdot \\
& \sum_{k=l}^{\binom{()}{l_s+j_{sa}-l}} \sum_{\substack{(j_{ik}=j_{sa}^{ik}+l_{k_1}-j_{sa}) \\ j^{sa}=l_i+n+j_{sa}-D-s}}^{l_s+j_{sa}-l} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$l_s \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

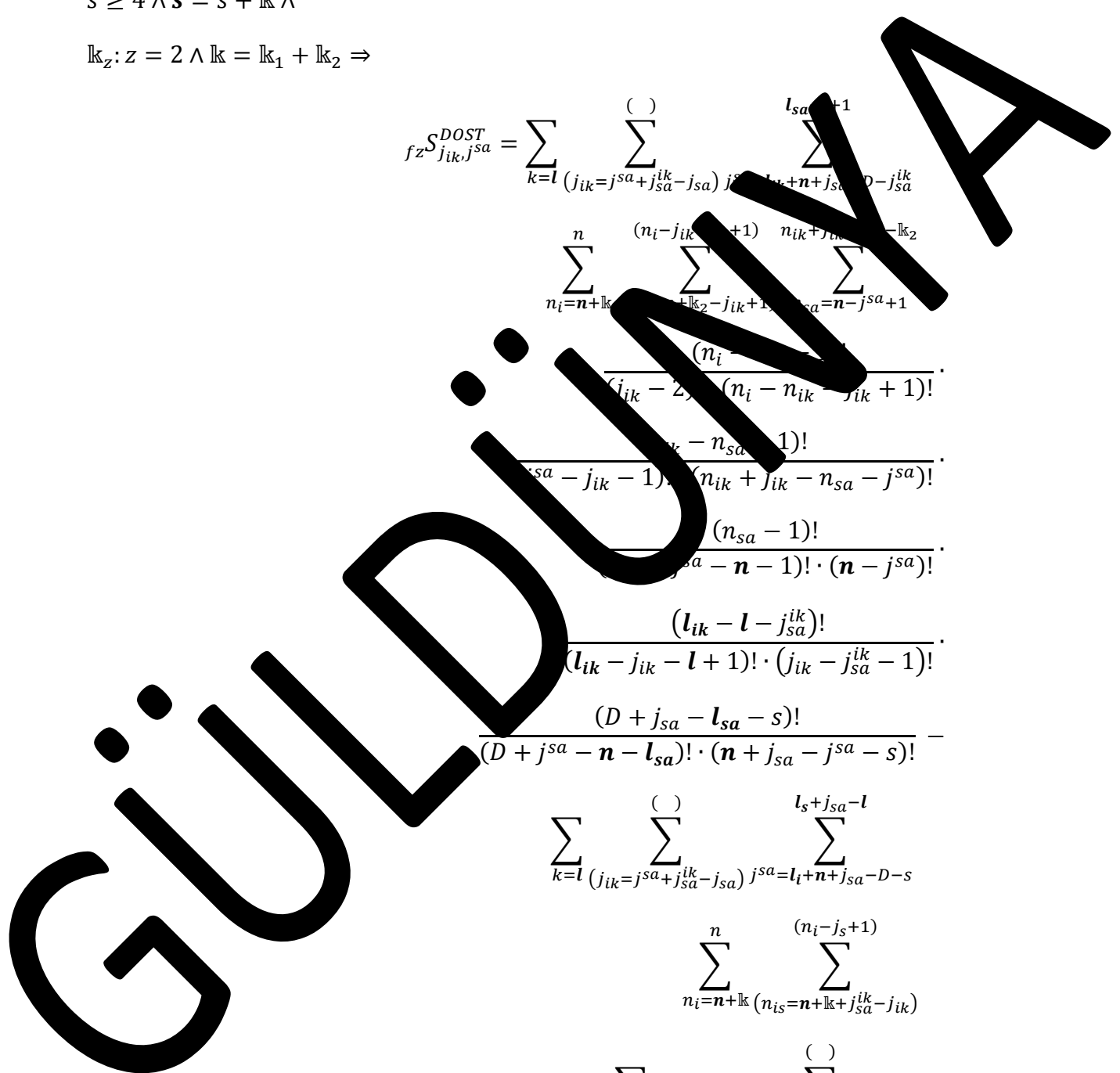
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\binom{()}{j_{sa}^s=l_i+n+j_{sa}-j_{sa}^{ik}}} \sum_{\binom{()}{l_{sa}+1}} \sum_{n_i=n+\mathbb{k}_1}^n \sum_{\binom{()}{n_i-j_{ik}+1}} \sum_{\binom{()}{n_{ik}+j_{ik}-\mathbb{k}_2}} \sum_{\binom{()}{n_{is}=n+\mathbb{k}_2+j_{sa}^{ik}-j_{ik}}} \sum_{\binom{()}{n_{sa}=n-j_{sa}+1}} \frac{(n_i - j_{ik} - 2)! (n_i - n_{ik} - j_{ik} + 1)!}{(j_{ik} - 2)! (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\binom{()}{l_s+j_{sa}-l}} \sum_{j_{sa}^s=l_i+n+j_{sa}-D-s} \sum_{n_i=n+\mathbb{k}_1}^n \sum_{\binom{()}{n_i-j_s+1}} \sum_{\binom{()}{n_{is}=n+\mathbb{k}_2+j_{sa}^{ik}-j_{ik}}} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}} \frac{(n_i - s - I)!}{(n_i - n - I)! \cdot (n - s)!} \cdot$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{j_{ik}=l}^{(l_{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}-D-j_{sa}}^{j_{sa}^{ik}-D-j_{sa}} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n - j_s + 1)}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - l)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1)} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - k_2)}^{(n_{sa} = n_{ik} + j_{sa}^{ik} - k_2)}$$

$$\frac{(l_s - l + 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - 1)! \cdot (j_{sa}^{ik} - 1)!} \cdot \frac{(l_s - l + 1)!}{(l_s - l + 1)! \cdot (j_{sa}^{ik} - 1)!}$$

$$\frac{(D - 1)!}{(D + j_{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k_1 = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i - k_1, j_{sa}^{ik}, k_2, j_{sa}^i, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{DOST}}} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{ik} + n - D)}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n - j_s + 1)}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{ik} + j_{ik} - j_{sa} - k_2)}$$

$$\begin{aligned}
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - l_{sa})!} \cdot \\
& \sum_{j_{ik}=l_i}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik} - D - s}^{(j_{sa}^{ik} - l_{sa} - j_{sa}^{ik})} \sum_{j_{sa}^{ik}=n + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)} \\
& \sum_{k=n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(n_i - j_s + 1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{(n_i - j_s + 1)} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > n - 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=l_i+n+j_{sa}-D-1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_s + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=l_s+j_{sa}-l+1}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{()}{l_{ik} + j_{sa}^{ik} - l - j_{sa}^{ik} + 1}} \sum_{j_{sa} = l_{sa} - n - D}^{(n_i - j_{sa})} \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1}^{(n_i - j_{sa} - \mathbb{k}_2)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(D - l_i)!}{(D + j_{sa}^{ik} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge$$

$$l_{ik} - \mathbb{k}_1 + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_{ik}, j_{sa}}^{DOST} = & \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-s-1)}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!} + \\
& \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is} \triangleq n+l_k-j_{ik})}^{(n_i-l+1)}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{sa}-l_{k_2})}^{(n_{ik}-l+1)} \sum_{(n_{ik}-j^{sa}-l_{k_2})}^{(n_{ik}-l+1)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_{sa} - l - 1)!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s -$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{zS}^{DOST} = \sum_{k=l}^{\binom{D}{k}} \sum_{\substack{j_{ik}=j_{sa}^i+k-j_{sa} \\ j_{sa}=l_{sa}+k-D}}^{\binom{l_s+j_{sa}-l}{k}} \sum_{n_i=n+l}^n \sum_{n_{ik}=n_{is}+j_{sa}^i-k-j_{sa}}^{n_i-k+j_{ik}-j_{sa}-k_2} \sum_{n_{sa}=n_{is}+j_{sa}^i-k-j_{sa}}^{n_{sa}+1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - k)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{\binom{n_{ik}}{j_{sa} - k} (n_{sa} - 1)!}{(j_{sa} - k - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{\binom{D}{k}} \sum_{\substack{j_{ik}=j_{sa}^i+k-j_{sa} \\ j_{sa}=l_i+n+j_{sa}-D-s}}^{\binom{l_s+j_{sa}-l}{k}} \sum_{n_i=n+l}^n \sum_{n_{is}=n+l+k+j_{sa}^i-j_{ik}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^i-k-j_{sa}}^{n_i-k+j_{ik}-j_{sa}-k_2} \sum_{n_{sa}=n_{is}+j_{sa}^i-k-j_{sa}}^{n_{sa}+1}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^i-k-j_{sa}}^{n_i-k+j_{ik}-j_{sa}-k_2} \sum_{n_{sa}=n_{is}+j_{sa}^i-k-j_{sa}}^{n_{sa}+1}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}^{ik}, j_{sa}^{ik}\} \wedge$$

$$s > 0 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_s - l - j_{sa} - s)!}{(l_s + j_{sa}^{ik} - n - 1)! \cdot (n - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{(l_s + j_{sa}^{ik})} \sum_{(j_{ik}=l_i + n_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik})} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}}^{(l_s + j_{sa}^{ik})} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$(n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}}^{DCT} = \sum_{k=l}^{\binom{D}{j_{ik}}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\binom{D}{j_{sa}^{ik}+1}} \sum_{(j_{sa}^{ik}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{\binom{D}{j_{sa}^{ik}+1}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_1+j_{sa}-j_{ik}+1)}^{\binom{n}{n-\mathbb{k}_1+1}} \sum_{(n_{sa}=n-j_{sa}+1)}^{\binom{n}{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{\binom{D}{j_{ik}}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\binom{D}{j_{sa}^{ik}+1}} \sum_{j_{sa}^{ik}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})}^{\binom{n}{n-j_s+1}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = 1 \wedge l_s = 0 \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{l_{ik}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\}$$

$$\mathbb{k}_z: z = 4 \wedge \mathbb{k}_z = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_z - 1 \wedge z = 2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}$$

$$\sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D) \quad l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \frac{(j_{sa}+j_{sa}^{ik}-j_{sa}) \quad l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{(j_{ik}-l_{ik}+n-D) \quad l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \cdot$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2} \frac{(n_i-j_{ik}-\mathbb{k}_1+1) \quad n_{ik}+j_{ik}-\mathbb{k}_2}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \cdot$$

$$\frac{(n_{sa}-1)!}{(j_{sa}-n_{sa}-1)!} \cdot \frac{(n_{sa}-1)!}{(j_{sa}-n_{sa}-1)!} \cdot \frac{(n_{sa}-1)!}{(j_{sa}-n_{sa}-1)!} \cdot \frac{(n_{sa}-1)!}{(j_{sa}-n_{sa}-1)!} \cdot$$

$$\frac{(n_{sa}-1)!}{(j_{sa}-n_{sa}-1)! \cdot (n-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(j_{sa}-n_{sa}-1)! \cdot (n-j_{sa})!} \cdot$$

$$\frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot$$

$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{ik}+j_{sa}-l-s+1} \frac{(l_{ik}-l+1) \quad l_{ik}+j_{sa}-l-s+1}{(j_{ik}=l_{ik}+n-D) \quad j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \cdot$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i-j_{ik}-\mathbb{k}_1+1) \quad n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1) \quad n_{sa}=n-j_{sa}+1} \cdot$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa})!}$$

$$\sum_{k=l}^{\binom{l_s + j_{sa} - l}{j_{ik} + j_{sa}^{ik} - j_{sa}}} \sum_{\substack{m=0 \\ m+n=D}}^{\binom{l_s + j_{sa} - l}{j_{ik} + j_{sa}^{ik} - j_{sa}}} \sum_{\substack{m=0 \\ m+n=D}}^{\binom{l_s + j_{sa} - l}{j_{ik} + j_{sa}^{ik} - j_{sa}}} \sum_{\substack{m=0 \\ m+n=D}}^{\binom{l_s + j_{sa} - l}{j_{ik} + j_{sa}^{ik} - j_{sa}}}$$

$$\sum_{m=n+l_k}^{\binom{n_i - j_s + 1}{n_i = n + l_k + j_{sa}^{ik} - j_{ik}}} \sum_{m=n+l_k}^{\binom{n_i - j_s + 1}{n_i = n + l_k + j_{sa}^{ik} - j_{ik}}}$$

$$\sum_{k=n_i + j_{sa}^s - j_{sa}^{ik} - l_{k_1}}^{\binom{()}{n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k_2}}} \sum_{k=n_i + j_{sa}^s - j_{sa}^{ik} - l_{k_1}}^{\binom{()}{n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k_2}}}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D - l_i < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i + n + j_{sa}^{ik} - D - s)} \sum_{(j_{ik} - D)}^{l_i + j_{sa} - l} \sum_{j_{sa}^{ik} - n + j_{sa} - D - s}^{l_i + j_{sa} - l} \sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}^{j_{sa} - \mathbb{k}_2} \sum_{n_i = n + \mathbb{k}}^{(n_i - n + \mathbb{k}_2 - j_{ik} + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{sa} = n - j_{sa} + 1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{l_i + j_{sa} - l - s + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\begin{aligned}
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - n_{sa} - 1)!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{(l_s + j_{sa}^{ik})} \sum_{(j_{ik} = l_{sa} + j_{sa}^{ik} - D - j_{sa}^{ik})} \sum_{(s_a = j_{ik} + j_{sa} - j_{sa}^{ik})} \\
& \sum_{n_i = n + l_k}^n \sum_{(n_{is} = n + l_k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - l_{k_1}}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k_2})}^{(\quad)} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \vee$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{SDOST}_{j_{ik}, j_{sa}} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}+1} \sum_{(j_{sa}=j_{sa}^{ik}+2)}^{l_{sa}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}+j_{ik}-k_2)}^{n_{ik}+j_{ik}-k_2} \sum_{(j_{sa}=n-j^{sa}+1)}^{n_{ik}+j_{ik}-k_2}$$

$$\frac{(n_i - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-k_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_{ik}, j^{sa}}^{DOST} = & \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik} \sum_{n=n+l_k}^n \sum_{(n_{is} = n - l_k)}^{(n_i - l_k + 1)} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - l_k - l_{k_1})}^{(n_{ik} = n_{is} + j_{sa}^{ik} - l_k - l_{k_2})} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + \dots$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n - l = l_k \geq \dots$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$j_{sa} = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz^{S_{j_{ik}, j_{sa}^{ik}}} = \sum_{k=l}^{(\dots)} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})}^{(\dots)} \sum_{j_{sa} = l_s + n + j_{sa} - D - 1}^{l_s + j_{sa} - l}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_s - l - j_{sa} - s)!}{(l_s - j_{sa} - n - 1)! \cdot (n - j_{sa} - s)!} \cdot \\
& \sum_{k=l}^{\binom{()}{l}} \sum_{\substack{j_{ik}=j^{sa} \\ (j_{ik}-j_{sa})}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{\binom{()}{n}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$l_s \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\substack{j_{ik}=l_s+n+j_{sa}^{ik}-l \\ j_{sa}^{ik} = j_{sa} + j_{sa} - j_{sa}^{ik}}} \frac{\binom{l_s + j_{sa}^{ik} - l}{j_{sa}^{ik} - j_{sa}}} \cdot \sum_{n_i=n+k}^n \sum_{\substack{n_{ik}+j_{sa}^{ik}-k_2 \\ n_{sa}=n-j_{sa}+1}} \frac{\binom{n_i - j_{ik} + 1}{n_{sa} - j_{ik} + 1}} \cdot \frac{\binom{n_i - n_{ik} + 1}{n_{sa} - j_{ik} + 1}}{\binom{n_i - n_{ik} - j_{ik} + 1}} \cdot \frac{\binom{n_i - n_{sa} + 1}{n_{sa} - j_{ik} - 1}}{\binom{n_{ik} + j_{ik} - n_{sa} - j_{sa}}}} \cdot \frac{\binom{n_{sa} - 1}{j_{sa} - n - 1} \cdot \binom{n - j_{sa}}{(n_{sa} - 1)!}}{\binom{n_{sa} - 1}{j_{sa} - n - 1} \cdot \binom{n - j_{sa}}{(n_{sa} - 1)!}} \cdot \frac{\binom{l_{ik} - l - j_{sa}^{ik}}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}}{(l_{ik} - l - j_{sa}^{ik})!}} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot \binom{n + j_{sa} - j_{sa} - s}!}} \cdot \sum_{k=l} \sum_{\substack{j_{ik}=l_i+n+j_{sa}^{ik}-D-s \\ j_{sa}^{ik} = j_{sa} + j_{sa} - j_{sa}^{ik}}} \sum_{n_i=n+k}^n \sum_{\substack{n_{is}=n+k+j_{sa}^{ik}-j_{ik} \\ n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}} \frac{\binom{l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1}{j_{sa}^{ik} - j_{sa}}} \cdot \frac{\binom{n_i - j_s + 1}{n_{sa} - j_{ik}}} \cdot \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{\substack{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2 \\ n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}} \frac{\binom{n_i - s - I}}{(n_i - n - I)! \cdot \binom{n - s}!}}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z^s}^{j_{ik}^{sa}} = \sum_{k=l}^{n} \binom{l_i + j_{sa} - l - s + 1}{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} j^{sa} = l_i + n + j_{sa} - D - s$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}} \sum_{l_s+j_{sa}-l}^{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{lk}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_s+1)}{(n_{is}=n+l_k+j_{sa}^{lk}-j_{sa})}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k_1}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{lk}-l_{k_2}}}$$

$$\frac{(l_s - l_{k_1})!}{(n - l)! \cdot (n - s)!} \cdot \frac{(l_s + j_{sa} - j_{sa}^{lk} - l)! \cdot (j_{sa} - j_{sa}^{lk} - 1)!}{(D - l)!} \cdot \frac{(n + j_{sa} - j^{sa} - s)!}{(D + j^{sa} + s - n - j_{sa})!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{lk} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} \leq n - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 > l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_{k_1} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1, j_{sa}^{lk} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{lk} - 1 \wedge$$

$$s: \{j_{sa}^i - l_{k_1}, j_{sa}^{lk}, l_{k_2}, j_{sa}^i - l_{k_2}, j_{sa}^i\}$$

$$l_{k_1} \geq 4 \wedge l_{k_2} \geq s + l_{k_1} \wedge$$

$$l_{k_2}: z \geq 2 \wedge l_{k_2} \geq l_{k_1} \Rightarrow$$

$$f_{z, j_{ik}, j_{sa}}^{SDOST} = \sum_{k=l} \sum_{\binom{(l_i+j_{sa}^{lk}-l-s+1)}{(j_{ik}=l_i+n+j_{sa}^{lk}-D-s)}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}} \sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_{ik}-l_{k_1}+1)}{(n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik} = l_{ik} + n_{sa} - j_{sa}^{ik}} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_{is} = n + l_{ik} + j_{sa}^{ik} - j_{ik}} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k_2}}$$

$$\sum_{n_{is} = n + j_{sa} - j_{sa}^{ik} - l_{k_1}} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k_2}}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - 1)}^{(j_{sa} - l)} \sum_{j_{sa} = l_s + n - D}^{(j_{sa} - l)} \dots$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - \mathbb{k}_2} \dots$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_s + j_{sa} - l + 1}^{l_{sa} - l + 1} \dots$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \dots$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \dots$$

$$\begin{aligned}
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa})!} \cdot \\
& \sum_{j_{ik}=j_{sa}^{ik} - j_{sa}}^{(j_{sa} - l - j_{sa}^{ik} + 1)} \sum_{j_{sa}^{ik}=j_{sa}^{ik} - j_{sa}}^{(j_{sa} - l - j_{sa}^{ik} + 1)} \sum_{j_{sa}^{ik}=n+l_k}^{(n_i - j_s + 1)} \sum_{j_{sa}^{ik}=n+l_k + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)} \sum_{j_{sa}^{ik}=n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - l_{k_1}}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k_2})} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$((D - l_i) < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - j_{sa} - 1)} \sum_{j_{sa}^{ik} = l_{sa} + n - D - j_{sa}}^{(j_{sa}^{ik} - D - j_{sa})} \sum_{l_{sa}}^{(l_{sa} - l + 1)} \sum_{n_i = n + k}^{(n_i - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{sa} - k_2)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa}^{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{(j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(l_{sa} - l + 1)} \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_{ik} + j_{ik} - j^{sa} - k_2)}$$

$$\begin{aligned}
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{(l_{ik} - 1)} \sum_{(j_{ik}=l_{ik} + j_{sa}^{ik} - D - j^{sa})} \sum_{(n_{sa}=j_{ik} + j_{sa} - j_{sa}^{ik})} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik}=n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - l_{k1}} \sum_{(n_{sa}=n_{ik} + j_{ik} - j^{sa} - l_{k2})}^{()} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa}^{l_s + j_{sa} - l})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} j_{sa}^{s_{sa+1}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_{ik} = \mathbb{k}_1 + 1)}^{(n_i - j_{ik} + 1)} \sum_{(n_{sa} = n - j_{sa} + 1)}^{(n_{ik} + j_{ik} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{sa} = n - j_{sa} + 1)}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\begin{aligned}
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa})!} \cdot \\
& \sum_{k=l}^{n_{sa} - j_{sa}^{ik} - l} \sum_{j_{sa}^{ik} = j_{sa} + j_{sa}^{ik} - l}^{l_s + j_{sa} - l} \sum_{j_{sa}^{ik} = j_{sa} + 1}^{n_i - j_s + 1} \\
& \sum_{k=n+l}^{n_{sa} - j_{sa}^{ik} - l} \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
& \sum_{k=n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{n_{sa} - n_{ik} + j_{ik} - j^{sa} - k_2} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq n + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - n - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(j_{sa} - l - j_{sa}^{ik})!}{(j_{sa} - j_{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) + \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j_{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j_{sa}=j_{sa}+2}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \right)$$

$$\begin{aligned}
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}+1} \sum_{(j_{sa}=j_{sa}^{ik}+2)}^{l_{sa}+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}+j_{ik}-k_2)}^{(n_{ik}+j_{ik}-k_2)} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}=n-j^{sa}+1)} \frac{(n_i - n_{ik} - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \\
& \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=j_{sa}+1}^{()} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()}
\end{aligned}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{n_i, j_{sa}^{ik}} = \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_s+j_{sa}-l)}^{j_{sa}=j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right)$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left(\sum_{k=l}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = j_{sa} + 2}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + \dots)} \dots \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1)} \dots \frac{(n_i - s - l)!}{n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s = l \wedge l_{sa} = D + j^{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - \mathbb{k} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n - l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_{ik}, j_{sa}}^{DOST} = & \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(D + j_{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j_{sa} - s)!} \Bigg) + \\
& \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \Bigg)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n_{is}+j_{sa}^{ik}-j_{ik})} \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_k)} \sum_{(j_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_k)} \frac{(l_{ik}-s-l)!}{(n-l)! \cdot (n-s)!} \cdot \frac{(l_{ik}-l-1)!}{(l_s+j_{sa}^{ik}-j_{ik}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+l_i)!}{(D+j^{sa}+l_{sa}-n-l_i-j_{sa}^{ik})! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - j_{sa}^{ik} \wedge$$

$$l_{sa} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} \geq l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n$$

$$D \geq n < n \wedge l = k \geq 2 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_2: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left(\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right)$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left(\sum_{k=l}^{(l_s + j_{sa}^{ik})} \sum_{\substack{(j_{ik} - j_{sa}^{ik} + 1) \\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}} \sum_{l_{sa}-l+1}^{l_{sa}-l+1} \right) \\
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(\cdot)}$$

$$\frac{(l_s-l+1)!}{(n-l)! \cdot (n-s)!} \cdot \frac{(l_s-l+1)!}{(l_s+j_{sa}^{ik}-j_{ik}-1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(D-n+1)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq l + j_{sa} - n \wedge l \leq D + s - n \wedge$$

$$D \geq n < n \wedge l \wedge \mathbb{k} \geq 0 \wedge$$

$$j_{sa} = j_{sa}^{i_1} - 1 \wedge j_{sa}^{ik} = j_{sa}^{i_2} - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1 \wedge$$

$$s \cdot \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq s \wedge s = s +$$

$$\mathbb{k}_z: z = 2, \dots = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\begin{aligned}
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=0}^{j_{sa}^{ik}-l} \sum_{j_{ik}=j_{sa}^{ik}+k}^n \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_i-j_s+1)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D > n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik})} \sum_{(j_{sa}=l_{sa})} \sum_{(l_{ik}+j_{sa}-j_{sa}^{ik}+1)} \sum_{(j_{sa}^{ik}+1)} \dots \right) +$$

$$\left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{(j_{sa}=l_{sa}+n-D)} \sum_{(n_i-j_{ik}-k_1+1)} \sum_{(n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)} \sum_{(n_i+n+k)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)} \sum_{(n_{sa}=n-j_{sa}+1)} \dots \right) +$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{(j_{sa}=l_{sa}+n-D)} \sum_{(n_i-j_{ik}-k_1+1)} \sum_{(n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)} \sum_{(n_i+n+k)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)} \sum_{(n_{sa}=n-j_{sa}+1)} \dots \right) +$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\begin{aligned}
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik})}^{(l_{ik}-l+1)} \cdot \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k+j_{ik}+1)}^{(n_{ik}-j^{sa}-l_k+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}-j^{sa}-l_k+1)} \cdot \\
& \frac{(n_i - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik})! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
\end{aligned}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq i - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > 0 \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s = 4 \wedge s = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

$$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa})}$$

$$\sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{sa}-j_{sa})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + j_{sa}^{ik} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \neq j_{ik} \wedge j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{l_s+j_{sa}-l}^{j_{sa}=l_{sa}+n} \right. \\ \sum_{n_i=n+k} \sum_{(n_{ik}=n+k_2-j_{ik})} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \\ \left. \frac{(n - j_{sa} - l - j_{sa}^{ik})!}{(n - j_{sa} - l - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=l_{sa}+n-D}^{(j_{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{l_s+j_{sa}-l} \right. \\ \sum_{n_i=n+k} \sum_{(n_{ik}=n+k_2-j_{ik}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \\ \left. \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \right)$$

$$\begin{aligned}
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = l_s + j_{sa}^{ik} - l + 1}^{j_{sa}^{ik} - l + 1} \cdot \\
& \sum_{n_i = n + k_1}^n \sum_{n_{ik} = j_{ik} + 1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \cdot \\
& \frac{(n_i - n_{ik})!}{(n_i - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \\
& \sum_{k=l}^{(\quad)} \sum_{(j_{ik} = j_{sa}^{ik} + j_{sa}^{ik} - j_{sa})}^{(\quad)} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_s + j_{sa} - l} \cdot \\
& \sum_{n_i = n + k_1}^n \sum_{(n_{is} = n + k_1 + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \cdot \\
& \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{(\quad)} \cdot
\end{aligned}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq i - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} -$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z \mathcal{S}_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}^{l_{sa} - l + 1} \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D, \dots, n_{ik} = n_{is} + j_{sa}^{ik} - l_{k_1}, \dots, n_{ik} + j_{ik} - j^{sa} - l_{k_2})} \frac{(n_i - j_s)!}{(n_i - n - l)! \cdot (n - s)!} \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l = l \wedge l_s = D - n - l \wedge$
 $2 \leq l < D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$
 $j_{sa}^{ik} \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
 $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 - j^{sa} \leq n + j_{sa} - s \wedge$
 $l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
 $l_i - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$
 $D \geq n < n \wedge l = l \geq 0 \wedge$
 $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$
 $s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{SDOST} = \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}} \\ \frac{(n_i - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\ \left. \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\ \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \right) \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n+l_k-j_{sa}^{ik}+1)}^{n_{ik}+j_{sa}-j_{sa}^{ik}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{sa} - n_{sa}^{ik} - 1)!}{(j_{sa} - 1)! \cdot (n_{sa} - n_{sa}^{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2$$

$$f_{zS}^{j_{ik}^{sa}} = \sum_{l=1}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left(\sum_{k=l}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - l_{sa} - l_{ik} - j_{sa}^{ik})} \sum_{(n_i - j_s + l)} \sum_{(n + \mathbb{k} (n_{is} + \mathbb{k} + j_{sa}^{ik} - j_{ik}))} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1)} \sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s = l \wedge l_s \geq D - n - 1 \wedge$$

$$j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n - l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
fz S_{j_{ik} j_{sa}}^{DOST} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik})!} \cdot \\
&\frac{(n_i - n_{sa} - 1)!}{(n_i + j_{sa} - n_{sa} - 1)! \cdot (n - j_{sa}^{ik})!} \cdot \\
&\frac{(l_{ik} - j_{sa}^{ik})!}{(n_i - j_{ik} - l_{k1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(D - n_{sa} - l_{sa} - s)!}{(D - j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \cdot \\
&\sum_{k=l}^{(j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
&\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k2})} \\
&\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
&\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(j_{sa} - j_{sa}^{ik})} \frac{(n_i - j_{ik} - j_{sa} + 1)!}{(n_i - n_{ik} - 1)!} \cdot \frac{(n_{ik} + j_{ik} - j_{sa} - k_2)!}{(n_{ik} - n_{sa} - 1)!} \cdot \frac{(n_i - n_{ik} - j_{ik} + 1)!}{(j_{sa}^s - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}^{ik} - 1, j_{sa}^{ik} - 1, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2, \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz \mathcal{S}_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} l_{ik+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{(l_{ik}-1)} \sum_{(j_{sa}^{ik}+1)}^{l_i+j_{sa}-l-s+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} j^{sa} = l_i + n + j_{sa} - D - s$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{sa}^{ik}}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_2}}$$

$$\frac{(l_i - l_s)!}{(l_i - n - l)! \cdot (l_s - s)!} \cdot \frac{(l_s - l_s)!}{(l_s + j_{sa} - j_{sa}^{ik} - 1)! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_s)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (l_i + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n - l_s \leq D + l_i + s - n - 1) \wedge$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n - l_s \leq D + l_s + j_{sa} - n - 1)) \wedge$

$D + j_{sa} - n - l_s \leq D + l_s + j_{sa} - n - 1) \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 4 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{n_i-j_{ik}-\mathbb{k}_1+1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j_{sa}+1}^{(n_i-n_{ik}-1)!} \frac{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \frac{(l_{sa}+j_{sa}^{ik})! \cdot (l_{ik}-j_{sa})!}{(l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \frac{(D+j_{sa}-l_{sa}-s)!}{(D+l_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} + \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n_i-j_{ik}-\mathbb{k}_1+1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j_{sa}+1}^{(n_i-n_{ik}-1)!} \frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{is}+l_{ik}-j_{ik})}^{(n_i-l+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-l_{ik}-l_2}^{(n_i-l+1)} \sum_{(n_i-s-l_2)}^{(n_i-l+1)} \frac{(n_i-l_2)!}{(n_i-l)! \cdot (n-s)!}$$

$$\frac{(l_{sa}-l-1)!}{(l_{sa}+j_{sa}^{ik}-j_{sa}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_{sa}-l)!}{(D+j_{sa}+l_{sa}-n-l_i-j_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq l_{sa} + j_{sa}^{ik} - l_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq l_{sa} \leq n + j_{sa} - j_{sa}^{ik}$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - l_{sa} < l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D > n \wedge l = l \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s \geq 4 \wedge \{j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + l_{k_2} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$\begin{aligned}
f_Z^{\mathcal{S}_{j_{ik}, j^{sa}}} &= \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_i + n + j_{sa} - D - s} \\
&\sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_i + j_{sa} - l - s + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1} \\
&\sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=1}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} j_{sa}^{l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \binom{(n_i-1)}{(n_i-\mathbb{k}-j_{ik})}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_2}^{\binom{()}{n_{ik}}} \frac{(n_i - s - 1)!}{(n_i - n - 1)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{l_i!}{(D + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = 1 \wedge l_s \leq D - l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq l_{sa} + j_{sa}^{ik} - l_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq l_{sa} \leq n + j_{sa} - j_{sa}^{ik}$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - l_{sa} < l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D > n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l \rightarrow j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s \geq 2 \wedge \{j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_{ik} j_{sa}}^{DOST} &= \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=l_i+n+j_{sa}-D-s} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_i - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \\
&\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n, n+k}^n \sum_{(n_{is} = n - j_{ik})}^{(n_i - k + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1}^{(n_i - k_1 - j_{sa} - k_2)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - j_{sa} \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D > n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s \in \{1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n - n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(j_{ik} - j_{sa} - 1)!}{(n_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
&\frac{(D - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
&\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
&\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(j_{ik}=j_{sa}+1)} \\
&\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
&\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^n \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(n-j_{ik}-s+1)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_{ik}-j_{ik}+1}^{(n_i-j_{ik}-s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^n \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(n-j_{ik}-s+1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = j_{ik} \wedge l_i + j_{sa} - s > l_{sa}$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_1 + z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is} \dots)}^{(n_i - l + 1)}$$

$$\sum_{(n_i - s - l)!}^{(n_i - s - l + 1)!} \cdot \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + \dots$$

$$l_{ik} - j_{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - l_i \leq D + \dots + s - n - 1 \wedge$$

$$D > \dots \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\dots \{j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik} j_{sa}}^{DOST} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - n_{sa} - l_{sa} - s)!}{(D - j^{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 &\sum_{k=l}^{(l_{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 &\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa})} \sum_{j_{sa}^{ik}+1}^{j_{sa}^{ik}} \sum_{j_{sa}^{ik} - j_{sa}}^{j_{sa}^{ik} - j_{sa} - 1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_{ik_2}-j_{ik}+1}^{(n_i - j_{ik} - 1) + 1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^s + s - n - l_i - j_{sa})! \cdot (n + j_{sa}^s - j_{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa}^s - s = l_{sa}$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa}^s - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^s - 1 \wedge j_{sa}^{ik} = j_{sa}^s - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s - \mathbb{k}_1, j_{sa}^{ik}, j_{sa}^s - j_{sa}^s, j_{sa}^s\} \wedge$$

$$s \geq 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2, \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{sa}+1}^{(j_{sa}+j_{sa}^{ik}-j_{sa})} l_{ik+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{(l_{ik}-1)} \sum_{(j_{sa}^{ik}+1)}^{l_{sa}-l+1} j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2 \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=j_{sa}+1)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{sa})}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}-j_{sa}^{ik}-\mathbb{k}_1)} \frac{(l_i - l_s)!}{(n-l)! \cdot (l-s)!} \cdot \frac{(l_s - l)!}{(l_s + j_{sa} - j_{sa}^{ik} - 1)! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \frac{(D-l)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (l_s + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$l_s \leq D - n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{\mathcal{S}DOST}_{j_{ik}, j^{sa}} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - \mathbb{k} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - n_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - s - 1)!}{(n_i - n - 1)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left((D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + 1 \wedge$$

$$k: z = 2 \wedge k = k_1 + 1 \Rightarrow$$

$$f_z^{DOST} S_{j_{ik}, j_{sa}}^{j^{sa}} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_{sa} + n - D}^{n_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}+1} \sum_{(j_{sa}=j_{sa}^{ik}+2)}^{l_{sa}+1}$$

$$\sum_{n_i=n+l_{k_1}}^n \sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{ik}+j_{ik}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}{(n_i - n_{sa} - 1)!}$$

$$\frac{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}{(n_{sa} - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

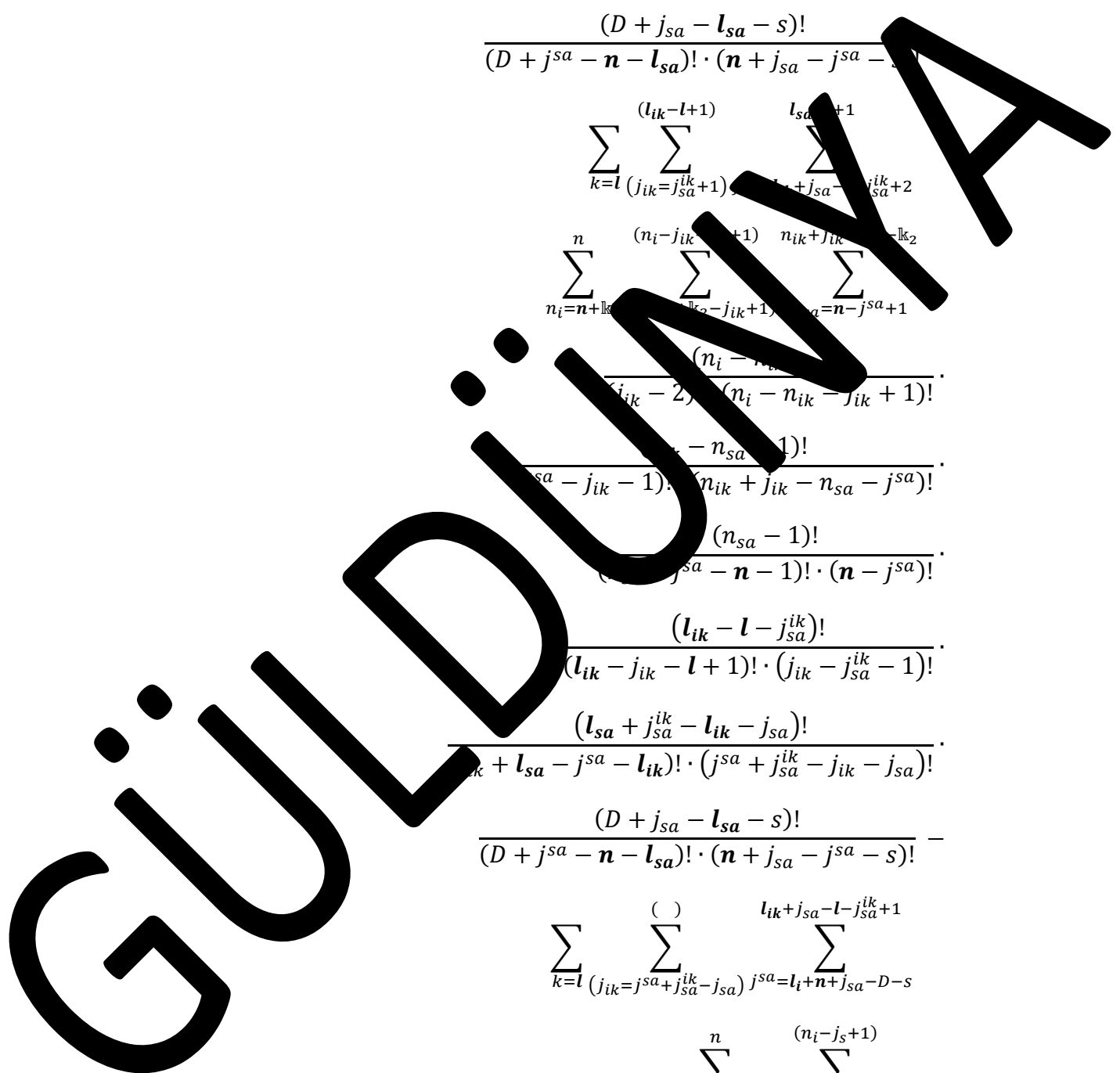
$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_{k_1}}^n \sum_{(n_{is}=n+l_{k_1}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$



$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + s - n - 1)$$

$$D \geq n < n \wedge l = i \wedge l_s \geq 0 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}^s, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge l_s = s + k \wedge$$

$$k_z: z = 2 \wedge k_1 + k_2 = k \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D}^{n} \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{sa} = n - j_{sa} - k_2)}^{n_{ik} + j_{ik} - j_{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{n_i=l_{sa}+n-k-D-j_{sa}}^{(n_i-j_{ik}-1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_{sa}-j_{ik}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

GÜLDENWA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_s \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$(l_{sa} \leq D - n - l - j_{sa} - s - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_z^{\mathcal{S}_{j_{ik}, j^{sa}}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j_{sa}=j_{sa}+1}^{(n_i+1)} \sum_{n_i=n+l}^{\binom{()}{n_i}} \sum_{(n_i-s+l)!}^{(n_i-s+l)!} \frac{(n_i-s+l)!}{(n_i-s+l)! \cdot (n-s)!} \cdot \frac{(l_s-l-1)!}{(l_s+l_{sa}-j_{sa}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_i-l)!}{(D+j_{sa}+l_{sa}-n-l_i-j_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$D \geq n < n \wedge l = l \wedge l_{sa} \leq D + j_{sa} - n \wedge$
 $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
 $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
 $D \geq n < n \wedge l = l \geq l \wedge$
 $j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$
 $s: \{j_{sa}^s, l_{k_1}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$
 $j_{sa} = s + l \wedge$
 $l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=j_{sa}+1}^{(n_i+1)} \right)$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left(\sum_{k=l}^{j^{sa}+j_{sa}^{ik}-1} \sum_{\substack{(j_{ik}-l_{k_1}+1) \\ (j_{ik}-l_{k_2}+1)}} \sum_{j^{sa}=j_{sa}+2}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right) \\
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{lk}+1)}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{lk}+2}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{lk}}^{n_{ik}+j_{ik}-j_{sa}^{lk_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - j_{sa}^{lk})!} \cdot \\
& \frac{(n_i - n_{sa} - 1)!}{(n_i + j_{sa} - n_{sa} - 1)! \cdot (n - j_{sa}^{lk})!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{lk})!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa}^{lk})!}{(j_{ik} + j_{sa}^{lk} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot \\
& \left(\frac{(D + j_{sa}^{lk} - j_{sa} - s)!}{(D + j_{sa}^{lk} - n_{sa} - s)!} \cdot (n + j_{sa} - j_{sa}^{lk} - s)! \right) - \\
& \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{lk}+j_{sa}^{lk}-j_{sa})}^{()} \sum_{j_{sa}=j_{sa}^{lk}+1}^{l_s+j_{sa}-l} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{lk}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{lk_2})}^{()} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{lk} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_{sa}^{lk} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{lk} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f_{z^s}^{DOS} = & \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(n_{ik}-j_{ik}-k+1)} j^{sa=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}-k-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \left. \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\begin{aligned} & \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(n_{ik}-j_{ik}-k+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \right. \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - n_{sa} - 1)!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - j_{sa}^{ik})!}{(D + j^{sa} - n - l_{sa} - j_{sa}^{ik} - j_{sa} - s)!} \cdot \\
& \sum_{k=j_{sa}^{ik}+1}^{j_{sa}^{ik}-l} \sum_{a=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_i=n+l_k}^{n} \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}}^{n} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_i-j_s+1)} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$(D > n) \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}+1}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - (n_i - j_s + 1))}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(l_s - l)!}{(n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l)!}{(l_s + j_{sa} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - 1)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$
- $2 \leq l \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} - 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa} + 1 > l_s \wedge l_{ik} + j_{sa} - j_{sa}^{ik} >$
- $D + j_{sa} - n < l_s \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$
- $D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^i, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^s, \dots, j_{sa}^i\} \wedge$
- $s \geq 4 \wedge s = \mathbb{k} + \mathbb{k} \wedge$
- $\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_Z S_{j_{ik}, j^{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\quad)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \right)$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left(\sum_{k=l}^{j^{sa}+j_{sa}^{ik}-1} \sum_{\substack{(j_{ik}-l_{k_1}+1) \\ (j_{ik}-l_{k_2}+1)}} \sum_{\substack{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1 \\ j^{sa}=l_{sa}+n-D}} \right) \\
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{lk}+1)}^{l_{sa}-l+1} j^{sa=l_{ik}+j_{sa}-l-j_{sa}^{lk}+2} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{lk_2}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_i - n_{sa} - 1)!}{(n_i + j^{sa} - n_{sa} - 1)! \cdot (n - j^{sa} - n_{sa} - 1)!} \cdot \\
& \frac{(l_{ik} - j_{ik} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot \\
& \left(\frac{(D + j_{sa} - n_{sa} - s)!}{(D + j_{sa} - n_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}^{lk}+j_{sa}^{lk}-j_{sa})}^{l_s+j_{sa}-l} j^{sa=l_i+n+j_{sa}-D-s} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{lk}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{lk} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l}^{l+1} \sum_{i_{ik}=l_{sa}+n+j_{sa}^{ik}}^{D-j_{sa}} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{i_{ik}=\mathbb{k}_1+1}^{i_{ik}-\mathbb{k}_1+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \left(\sum_{k=l}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D} \right)$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{j_{ik}=l_{sa}}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=l_{sa}-l+1}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - (n_i - j_s + 1))}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - k_2)}^{(\cdot)}$$

$$\frac{(l_i - l_s)! \cdot (l_s - l)!}{(l_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l)!}{(l_s + j_{sa}^{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_{ik} \leq n + l_s + j_{sa}^{ik} - n \wedge$

$D \geq n < n \wedge l - k \geq 0 \wedge$

$j_{sa} \geq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq j_{sa}^s = s +$

$k_z: z = 2, \dots = k_1 + k_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\begin{aligned}
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - n_{sa} + 1)!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - l_{sa})!} \cdot \\
& \sum_{k=l}^{\Delta} \sum_{\substack{0 \leq l_{ik} + n - l_{sa} - j_{sa}^{ik} \\ l_{ik} + n - l_{sa} - j_{sa}^{ik}}}^{(l_s + j_{sa}^{ik} - l)} \sum_{\substack{0 \leq n_{is} + \mathbb{k} \\ n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik}}}^{(n_i - j_s + 1)} \sum_{\substack{0 \leq n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2 \\ n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}}^{()} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq n + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{(\quad)}{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{\binom{l_i+j_{sa}-l-s+1}{j_{sa}=l_i+j_{sa}-D-s}} \sum_{\binom{n_i-j_{ik}-\mathbb{k}_1+1}{n_{ik}=n+\mathbb{k}_2+1}} \sum_{\binom{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}{n_{sa}=n-j_{sa}+1}} \frac{(n_i - n_{sa} - 1)!}{(j_{ik} - l - 1)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l} \sum_{\binom{(\quad)}{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{\binom{l_s+j_{sa}-l}{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}} \sum_{n_i=n+\mathbb{k}} \sum_{\binom{n_i-j_s+1}{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{(\quad)}{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} j_{sa}^{DOST} &= \sum_{k=1}^{(l_i + j_{sa}^{ik} - s + 1)} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{j_{sa}^{ik} - D - s} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{j_{sa}^{ik} - D - s} \\ &= \sum_{i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \\ &= \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ &= \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ &= \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &= \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ &= \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\ &= \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l_s - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i - j_{sa} - s = \dots \wedge$

$D + j_{sa} - n < l_{sa} \leq D + \dots + j_{sa} - n - \dots$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^{i-1} \wedge j_{sa}^{i-1} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - \dots \wedge$

$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{i-1}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 1 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z^{DOST}_{j_{ik}, j^{sa}} = \sum_{k=l}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-l-s+1}^{j_{sa}^{ik}-l-s+1} \sum_{n_i=n+l_k}^n \sum_{n_{ik}=n_{ik}-j_{ik}+1}^{(n_i-j_{ik}-1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l}$$

GÜLDÜZÜM

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i - j_{sa} - s = \dots \wedge$

$D + j_{sa} - n < l_{sa} \leq D + \dots + j_{sa} - n - \dots$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^{i_1} - 1 \wedge j_{sa}^{i_2} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{i_1} - \dots \wedge$

$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{i_1}, \dots, j_{sa}^{i_k}\} \wedge$

$s \geq 1 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{j_{ik}=l_i}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-s}^{l_i+j_{sa}-l-s+1} \sum_{n_i=n+l_k}^n \sum_{n_{ik}=n_{ik_2}-j_{ik}+1}^{(n_i-j_{ik}-1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-j_{sa}}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

GÜLDÜZ

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > j_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$(l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \rightarrow j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l}^{\binom{()}{}} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}-l+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - 1)!} \cdot \\
&\frac{(n_i - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
&\frac{(l_{ik} - j_{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
&\frac{(D - j_{sa} - l_{sa} - s)!}{(D - j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
&\sum_{k=l}^{\binom{()}{}} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
&\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{\binom{()}{}} \\
&\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
&\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOST} = \sum_{k=1}^{\binom{D}{k}} \sum_{j_{ik}=j}^{\binom{D-k}{j}} \sum_{j_{sa}^i=j_{sa}+1}^{\binom{D-k-j}{j_{sa}+1}} \sum_{n_i=n+\mathbb{k}}^{\binom{n_i-j_{ik}-1}{n_i-j_{ik}-1}} \sum_{n_{ik}=\mathbb{k}_2-j_{ik}+1}^{\binom{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{n_{sa}-1}{n_{sa}-1}} \frac{(n_i - n_{ik} - 1)!}{(j_{sa}^i - j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{\binom{D}{k}} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{D-k}{j_{ik}}} \sum_{j_{sa}^i=l_i+n+j_{sa}-D-s}^{\binom{l_s+j_{sa}-l}{j_{sa}^i}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik}}^{\binom{n_i-j_s+1}{n_{is}}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j_{sa}^s + s - n - l_i - j_{sa})! \cdot (n + j_{sa}^s - j_{sa}^{ik} - s)!}$$

$$\left((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n \vee$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^{i-1} \wedge j_{sa}^{ik} = j_{sa}^{i-1} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s - \mathbb{k}_1, j_{sa}^{i-1}, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}; z = 2, \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)}{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_s - l - j_{sa} - s)!}{(l_s - j^{sa} - n - 1)! \cdot (n - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik})} \sum_{(j_{ik}=l_i + n_{ik}^{ik} - D - s)}^{(l_s + j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_s + j_{sa}^{ik})} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$(n_i - s - l) < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} S_{j_{ik}}^D = & \sum_{l=0}^{(j_{sa}^{ik} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{s+j_{sa}-l}} \sum_{j^{sa} = l_{sa} + n - D}^{l_{s+j_{sa}-l}} \\ & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\ & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\begin{aligned}
& \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} j^{sa} = l_s + j_{sa} - l + 1 \\
& \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_i - n_{sa} - 1)!}{(n_i + j^{sa} - n_{sa} - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l_{sa} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
& \sum_{k=l}^{()} \sum_{(j_{ik} = j_{sa}^{ik} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_i + n + j_{sa} - D - s} \\
& \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$\left((D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s - l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^k \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z \geq 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} \sum_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \\ &\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\ &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{l-1} \\
 & \sum_{n_i = n + k}^n \sum_{n_{ik} = n_{ik} + j_{ik} - j_{sa}^{ik}}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j_{sa}^{ik} + 1}^{n_{ik} + j_{ik} - j_{sa}^{ik}} \\
 & \frac{(n_i - n_{ik})!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 & \sum_{n_i = n + k}^n \sum_{n_{is} = n + k + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}^{()}
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik})!}$$

$$\left((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik}} \\ \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} - j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \\ \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = l_{sa} - l + 1}^{l_{sa} - l + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{()} \frac{(n_{is} - s - l)!}{(n_{is} - n - l)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq l_i < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + 1$$

$$k: z = 2 \wedge k = k_1 + 1 \Rightarrow$$

$$f_z^S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = l_{ik} + n - D)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{ik} - n_{sa} - 1)!}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-s}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{ik}-j_{sa}}^{(l_{ik}-l+1)}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{n_{ik}=n+l_{ik}-j_{ik}+1}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-l_{k2}}$$

$$\frac{(n_i - n_{ik} - j_{ik} + 1)!}{(n_i - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}^{ik}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2}}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik})!}$$

$$\left((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l} \sum_{\binom{(\cdot)}{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{\binom{(\cdot)}{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}} \\
&\sum_{n_i=n+l_k}^n \sum_{\binom{(\cdot)}{(n_i-j_{ik}-l_{k_1}+1)}} \sum_{\binom{(\cdot)}{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} + j_{sa})!} \cdot \\
&\frac{(n - n_{sa} - 1)!}{(n_i + j_{sa} - n_{sa} - 1)! \cdot (n - j_{sa})!} \cdot \\
&\frac{(j_{ik} - j_{sa}^{ik})!}{(n_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(D - l_{sa} - l_s)!}{(D + j_{sa} - n - l_{sa} - l_s)! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
&\sum_{k=l} \sum_{\binom{(\cdot)}{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{\binom{(\cdot)}{l_s+j_{sa}-l}} \\
&\sum_{n_i=n+l_k}^n \sum_{\binom{(\cdot)}{(n_i-j_s+1)}} \\
&\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}} \sum_{\binom{(\cdot)}{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})}} \\
&\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
&\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l = i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=i}^n \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j_{sa}=j_{sa}^{sa}} \frac{\binom{n}{n_i - j_{ik} - \mathbb{k}_1 + 1} \binom{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}}{\binom{n_i - n_{ik} - 1}!} \right) \cdot \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} + \left(\sum_{k=i}^n \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j_{sa}=j_{sa}^{sa}+1} \frac{\binom{l_{sa} - i}{l+1}}{\binom{n}{n_i - j_{ik} - \mathbb{k}_1 + 1} \binom{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}}{\binom{n_{sa} - n_{sa} - 1}!} \right) \cdot \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_k \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n_{ik}+1)}^{(n_{ik}+1)} \sum_{(n_{sa}=n_{sa}+j_{ik}-j^{sa}-k_2)}^{(n_{sa}+j_{ik}-j^{sa}-k_2)} \frac{(D - l_{ik})!}{(n - k)! \cdot (n - s)!} \frac{(D - l_i)!}{(n + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > 0 \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k_1 + k_2 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^{ik}, j_{sa}^{ik}, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \leq n + k \wedge$$

$$z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=1}^n \sum_{(j_{ik}=j_{sa}^{ik})}^{(n)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right)$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l_{sa} - l + j_{sa})!}{(l_{ik} - j_{ik} - l + j_{sa})! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
& \left(\frac{(j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)!} \right) + \\
& \left(\sum_{k=1}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right) \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right)
\end{aligned}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{n_i=n+k}^n \sum_{n_{ik}=n_i-j_{ik}-k_1+1}^{n_i-j_{ik}-k_1+1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}^{n_{ik}+j_{ik}-j_{sa}-k_2} \sum_{j_{sa}^{ik}=j_{sa}}^{j_{sa}^{ik}=j_{sa}} \sum_{j_{sa}^i=j_{sa}}^{j_{sa}^i=j_{sa}} \frac{\binom{n_i-n_{ik}-1}{j_{ik}-2} \cdot (n_i-n_{ik}-j_{ik}+1)!}{(n_i-n_{sa}-1)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-i^l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-i^l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \cdot \sum_{k=i^l}^{\binom{()}{i^l}} \sum_{j_{ik}=j_{sa}^{ik}}^{\binom{()}{j_{ik}=j_{sa}^{ik}}} \sum_{j_{sa}^i=j_{sa}}^{\binom{()}{j_{sa}^i=j_{sa}}}$$

$$\sum_{n_i=n+k}^n \sum_{n_{ik}=n_i-j_{ik}-k_1+1}^{\binom{()}{n_{ik}=n_i-j_{ik}-k_1+1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}^{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}} \frac{(n_i-s-k)!}{(n_i-n-k)! \cdot (n-s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{i,ik}^{DOST} j_{sa}^{ik} = \sum_{k=i}^l \sum_{j_{sa}^{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{j_{sa}^{ik} - j_{sa}} \sum_{j_{sa} = j_{sa}}^{l_{sa} - i^{l+1}}$$

$$\sum_{n=n+\mathbb{k}}^{n+\mathbb{k}-\mathbb{k}_1+1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n+\mathbb{k}-\mathbb{k}_1+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} -$$

$$\sum_{k=i}^l \sum_{j_{sa}^{ik} = j_{sa}}^{j_{sa}^{ik} - j_{sa}} \sum_{j_{sa} = j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$fz = \sum_{k=i}^l \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}=j_{sa}}^{l_{ik}+j_{sa}-i^l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}} \sum_{n_{sa}=n-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{\binom{()}{n_{sa}=n_{ik}}}$$

$$\frac{(n_i - s - \binom{()}{k})!}{(n_i - n - \binom{()}{k})! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - \binom{()}{k} - l_i)! \cdot (n - \binom{()}{k})!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, \dots, j_{sa}^i\} \wedge$$

$$s \cdot 4 \wedge s = k_1 + k_2$$

$$k_z: k = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz_{j_{ik}j_{sa}}^{DOST} = \sum_{k=i}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}^{ik})}^{\binom{()}{l_{sa}+j_{sa}^{ik}-i-l-j_{sa}+1}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{\binom{()}{n_{sa}=n-j_{sa}+1}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{()}{n_{ik}+j_{ik}-j^{sa}-k_2}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \cdot$$

$$\sum_{k=0}^{(\cdot)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_1+1)}^{(\cdot)} \sum_{n_{sa}=n+k_2+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n - k)!}{(n - k)! \cdot (n - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} \wedge$$

$$l_{ik} - i^l + 1 > l_s \wedge n + j_{sa}^{ik} - j_{sa} =$$

$$D \geq n < n \wedge l = i^l \wedge k \geq 0$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge n \leq j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, i_{sa}\} \wedge$$

$$s \geq 4, s = s + 1$$

$$k_z, z = 2, k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i^l}^{(l_{ik}-i^{l+1})} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \cdot \sum_{k=1}^n \sum_{j_{sa}=j_{sa}}^{(\cdot)} \sum_{n_{ik}=n_i - j_{ik} - l_{ik} + 1}^{(\cdot)} \sum_{n_{sa}=n_{ik} + j_{ik} - j^{sa} - l_{k_2}}^{(\cdot)} \frac{(n_i - s - l_k)!}{(n_i - n - l_k)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n, l = i^l, l \leq D - n + 1$

$j_{sa}^{l_k} \leq j_{ik} \leq j_{sa}^{j_{sa}^{ik}} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{n + j_{sa} - s} \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa}^{j_{sa}^{ik}} - j_{sa} = l_{ik} \wedge$

$l_{ik} \leq n + j_{sa}^{ik} - n, l_i \leq D + s - n \wedge$

$D \geq n < n, l = l_k \geq 0 \wedge$

$j_{sa}^{l_k} \leq j_{ik} - 1 \wedge j_{sa}^{l_k} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{l_k} - 1 \wedge$

$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{l_{k_2}}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 4 \wedge s = s + l_k \wedge$

$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$

$$fzS_{j_{ik}j_{sa}}^{DOST} = \sum_{k=i}^{l} \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{sa}+j_{sa}^{ik}-i-l-j_{sa}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+l}^n \sum_{(n_{ik}=n+l-k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} + j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(n_i - i - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i - l - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(n_i + j_{sa} - j_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \sum_{k=i}^{l} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\cdot)} \sum_{j_{sa}=j_{sa}} \sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{(\cdot)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}^{(\cdot)} \frac{(n_i - s - k)!}{(n_i - n - k)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$(D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{ik} < j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{j_{sa}^{DOST}} = \sum_{k=i}^n \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}^{iL+1}}^{j_{sa}^{iL+1} - iL + 1} \frac{\binom{n}{n_{ik} - \mathbb{k}_1 + 1} \binom{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}{n_{sa} = n - j_{sa} + 1}}{\binom{n_i - n_{ik} - 1!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - iL - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - iL + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=i}^n \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}^{iL+1}}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$f_z^S j_{sa}^{ST} = \sum_{k=i^l}^n \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}^{ik}=j_{sa}}^{l_{ik}+j_{sa}-i^l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\begin{aligned}
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) + \\
& \left(\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(j_{sa}+j_{sa}^{ik}-j_{sa}-1)} l_{ik}+j_{sa}-i-l-j_{sa}^{ik}+1 \sum_{j_{sa}=j_{sa}+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} n_{ik}+j_{ik}-j_{sa}-l_{k_2} \\
& \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}-j_{sa}+1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - i - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{ik} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\
& \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{ik}-i+1)} \sum_{j_{sa}=l_{ik}+j_{sa}-i-l-j_{sa}^{ik}+2}^{l_{sa}-i+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} n_{ik}+j_{ik}-j_{sa}-l_{k_2} \\
& \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}-j_{sa}+1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}
\end{aligned}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=1}^n \sum_{\substack{(\cdot) \\ = j_{sa}^{ik}}} \sum_{a=j_{sa}}^{\cdot} \sum_{n_i=n+k}^n \sum_{\substack{(\cdot) \\ (n_{ik}=n+k_1+1)}} \sum_{n_{sa}=n-j_{ik}-j_{sa}-k_2}^{\cdot} \frac{(n_i - l_i)!}{(n_i - n - k)! \cdot (n - s)!} \cdot \frac{(n - l_i)!}{(n + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i l \wedge l_{sa} \leq \dots + j_{sa} \wedge j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} + \dots \leq j^{sa} \leq n + j_{sa} - s \wedge l_{ik} - j_{sa} + \dots > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > \dots D \geq n < n \wedge l_{sa} \geq 0 \wedge j_{sa} \leq \dots - 1 \wedge j_{sa}^{ik} = \dots - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1 \wedge s: \{j_{sa}^{ik}, k_1, \dots, k_2, j_{sa}, \dots, i\} \wedge s \geq \dots = s + k_1 \wedge k_z: z = 2 \dots = k_1 + k_2 \Rightarrow$$

$$f_{j_{ik} j_{sa}}^{DOST} = \left(\sum_{k=1}^n \sum_{\substack{(\cdot) \\ = j_{sa}^{ik}}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\cdot} \sum_{n_i=n+k}^n \sum_{\substack{(\cdot) \\ (n_{ik}=n+k_1+1)}} \sum_{n_{sa}=n-j_{sa}^{ik}-k_2}^{\cdot} \right)$$

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa})! \cdot (n - l_{sa})!} \right) + \\
 & \left(\sum_{k=i^l}^{(l_{ik} - i^l + 1)} \sum_{j_{sa}^{ik} = j_{ik} - l_{sa} - i^l + 1}^{n_{sa} - i^l + 1} \right) \\
 & \sum_{n=n+l_{ik}}^n \sum_{(n_{ik}=n - j_{ik} - l_{ik_1})}^{(n_{ik} + j_{ik} - j^{sa} - l_{ik_2})} \sum_{n_{sa}=n - j^{sa} + 1} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=i^l}^{()} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}
 \end{aligned}$$

GÜLDENWA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOS} = \left(\sum_{k= {}_i l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-{}_i l-j_{sa}^{ik}+1} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\begin{aligned}
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) + \\
 & \left(\sum_{k=i}^l \sum_{(j_{ik}=l_{ik}+n-D)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-i-l-j_{sa}^{ik}+1} \right. \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - i - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{ik} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \sum_{k=i}^l \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-i+1)} \sum_{j^{sa}=l_{ik}+j_{sa}-i-l-j_{sa}^{ik}+2}^{l_{sa}-i+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}
 \end{aligned}$$

GÜLDENWA

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - l_{sa})!}$$

$$D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - l_{sa} = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{j_{ik}, j_{sa}^{ik}} = \sum_{k=i}^n \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-i l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} \text{DOST}_{sa} &= \sum_{k=i}^n \sum_{j_{sa}^{ik} = j_{sa} - j_{sa} - \mathbb{k}}^{(n - j_{sa} - \mathbb{k}_1 + 1)} \sum_{j_{sa}^{ik} = l_i + n + j_{sa} - D - s}^{l_i + j_{sa} - i^{l-s+1}} \\ &\sum_{i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \end{aligned}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^{(l_i + j_{sa}^{ik} - i l - s + 1)} \sum_{(j_{ik} = l_i + j_{sa}^{ik} - D - s)} \sum_{(n_{sa} = j_{sa}^{ik} - k)} \sum_{n_i = n + k}^n \sum_{(n_{ik} = n - j_{ik} + 1)}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=1}^n \sum_{l=1}^{(j_{sa}^{ik} - j_{sa} + 1)} \sum_{i=1}^{l+j_{sa} - l - s + 1} \frac{(n_i - j_{ik} - l + 1) \cdot n_{ik} + j_{ik} - \mathbb{k}_2}{(n_i - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^k \leq j_{ik} - j_{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i + j_{sa} - s < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-i^{l+1})} \sum_{(j^{sa}=l_i+n+j_{sa}-D)}^{(l_i+j_{sa}-i^{l-s+1})} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-1)} \frac{(n_i-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{sa}+1)!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(n_i-i^{l-j_{sa}})^{j_{sa}}}{(n_{ik}-j_{ik}-i^{l-j_{sa}}+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_{sa}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j^{sa}-n-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$D \geq n < n \wedge l \leq i^l \wedge l_s = D - n + 1 \wedge$$

$$j_{sa}^{ik} - j_{ik} \leq j^{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge$$

$$l_{ik} - j_{ik} + 1 = l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^n \sum_{i=1}^l \binom{(\cdot)}{(j_{ik}=j_{sa}^{lk})} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{ik}=n+lk_2-j_{ik}+1)}^{(n_i-j_{ik}-lk_1+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-lk_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} + j_{sa})!}$$

$$\frac{(n_i - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=1}^n \sum_{i=1}^l \binom{(\cdot)}{(j_{ik}=j_{sa}^{lk})} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n}^n \sum_{(n_{ik}=n_i-j_{ik}-lk_1+1)}^{(\cdot)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2}$$

$$\frac{(n_i - s - lk)!}{(n_i - n - lk)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n \wedge l = 1 \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} \wedge j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = lk \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, lk_1, j_{sa}^{ik}, lk_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{S^{DOST}} = \sum_{k=1}^n \sum_{i=1}^k \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j_{sa}=j_{sa}}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}}$$

$$\frac{(n_i-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}+1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik})! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!}$$

$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D+n_{sa}-n-l_{sa})! \cdot (n-s)!}$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - s \wedge l_i \leq D - s - j_{sa} \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D - s - n \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^{\binom{()}{l+1}} \sum_{j_{sa}^{ik}} \sum_{j_{sa}^{sa}} \sum_{n_i=n+\mathbb{k}}^{\binom{()}{n_i-n_{ik}-\mathbb{k}_1+1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{\binom{()}{n_{sa}-n_{sa}-1}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{()}{n_{sa}-j_{ik}-1}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \sum_{k=i}^{\binom{()}{l+1}} \sum_{j_{sa}^{ik}} \sum_{j_{sa}^{sa}} \sum_{n_i=n+\mathbb{k}}^{\binom{()}{n_i-n_{ik}-\mathbb{k}_1+1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{\binom{()}{n_{sa}-n_{sa}-1}} \frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\left((D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = k_1 + k_2 \wedge$$

$$k_2 \wedge k_1 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{zS}^{DOST}_{j_{ik}, j_{sa}} = \sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{l_{sa}^{i-l+1}}^{j_{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n_{sa} - j^{sa})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(l_{sa} + j_{sa}^{ik} - j_{sa}^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{sa})!} \cdot \frac{(l_{sa} - 1)!}{(l_{sa} + j^{sa} - n - l_{sa})! \cdot (n_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa} - n - 1)) \wedge$

$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa} - n - 1)) \wedge$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^l \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{(l_{sa}+j_{sa}^{ik}-i-l-j_{sa}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} + j_{sa})!}$$

$$\frac{(n_i - 1)!}{(n_i - j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(n_i - i - 1)!}{(l_{ik} - j_{ik} - i - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(n + j_{sa} - n - l)! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\left((D \geq n < n \wedge l = i \wedge l_{sa} \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{ik} + j_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l = i \wedge l_{sa} \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} < j_{ik} < j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = l_k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^n \sum_{i=1}^{\binom{n}{k}} \sum_{l=1}^{l_{ik}+j_{sa}-i-l-j_{sa}^{ik}+1} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}} \dots$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}+j_{sa}-j_{sa}^{ik}-\mathbb{k}_2)}^{n_{ik}+j_{sa}-j_{sa}^{ik}-1} \dots$$

$$\frac{(n_{ik}-n_{ik}-1)!}{(j_{sa}^{ik}-2)! \cdot (n_{ik}-n_{ik}-j_{ik}+1)!} \dots$$

$$\frac{(j_{sa}^{ik}-1)! \cdot (n_{ik}+j_{ik}-j_{sa}^{ik}-1)!}{(j_{sa}^{ik}-1)! \cdot (n_{ik}+j_{ik}-j_{sa}^{ik}-1)!} \dots$$

$$\frac{(n_{sa}-n_{sa}-n-1)! \cdot (n-j_{sa})!}{(n_{sa}-n_{sa}-n-1)! \cdot (n-j_{sa})!} \dots$$

$$\frac{(l_{ik}-i-l-j_{sa}^{ik})!}{(l_{ik}-i-l-j_{sa}^{ik}-1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \dots$$

$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}^{ik}-s)!}$$

$$\left((D \geq n < n+1) \wedge l = i \wedge l_s \leq D - n + 1 \wedge \dots \right)$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + \dots \geq l_s \wedge l_s \leq j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$(D \geq n < n+1) \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} \sum_{k=0}^n \sum_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=0}^n \sum_{j_{ik}=l_{ik}+n-D}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} > D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} > D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1$$

$$s: \{j_{sa}^{s, k_1}, j_{sa}^{s, k_2}, j_{sa}^i, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + 1 \wedge$$

$$k_z: z \geq 2 \wedge k = k_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=l_{ik}+n-D}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left((D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge$$

$$l_{sa} > D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > 0 \wedge$$

$$l_s > D + l_{sa} + j_{sa} - n - 1 - (j_{sa}^{ik})) \wedge$$

$$D > n < n \wedge l = {}_i l \geq 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^k, j_{sa}^i, j_{sa}^j\} \wedge$$

$$s^k + 1 \wedge s = s + k \wedge$$

$$k_z: z = 2, k_z = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k={}_i l} (l_{ik} - {}_i l + 1) \sum_{(j_{ik}=j_{sa}^{ik})} l_{sa} - {}_i l + 1 \sum_{j^{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n_{sa} - j^{sa})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{ik} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(n - l_{sa} - 1)!}{(n + j^{sa} - n - l_{sa})! \cdot (n - j^{sa} - s)!}$$

$((D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa}^{ik} > l_{ik} \wedge$

$l_{sa} > D + l_s + j_{sa} - n - 1) \vee$

$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} \wedge$

$l_{sa} - j_{sa}^{ik} + 1 > l_s \wedge$

$l_{sa} > D + l_s + j_{sa} - n - 1) \vee$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-i^{l+1})} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_{sa}-i^{l+1}}$$

$$\sum_{n_i=n+l_1}^n \sum_{(n_{ik}=n+l_2-j_{ik}+1)}^{(n_i-j_{ik}-l_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa})!}$$

$$\frac{(n_i - 1)!}{(n_i - j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^{l+1} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(l_{sa} + j_{sa} - l_{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(n + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - i^{l+1} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s \neq i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - i^{l+1} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s \neq i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \Big) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\left((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \Big) \wedge$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \Big) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right)$$

$$f_z S_{j_{sa}}^{DOST} = 0$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right. \\
& \left. \left(\sum_{k=l}^{j^{sa}+j_{sa}^{ik}-1} \sum_{\substack{j_{ik}=n-D \\ (j_{ik}+n-D)}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right) \right) \\
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right)
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} j^{sa=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i - n_{sa} - 1)!}{(n_i + j^{sa} - n_{sa} - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left(\frac{(D + j_{sa} - j^{sa} - s)!}{(D + j_{sa} - n - j^{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} j^{sa=l_i+n+j_{sa}-D-s} \\
 & \sum_{n_{ik}=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDEN

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_z^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=l_{ik}+n-D}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} j^{sa=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \binom{n_i+l_k+1}{n_i+l_k-j_{ik}}$$

$$\sum_{n_{ik}=n_i+j_{sa}^{ik}-l_k-1}^{(\quad)} \binom{(\quad)}{n_{ik}-j^{sa}-l_k-2} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_i > D - n + 1 \wedge$$

$$2 \leq l \leq D - l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D - l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} j_{sa}^{sa} \sum_{(j_{sa}=j_{sa}+j_{sa}-j_{sa}^{ik})} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ \left. \frac{(l_{sa} - l + 1)!}{(l_{sa} - j_{sa} - l + 1)! \cdot (j_{sa} - l_{sa} - 1)!} \right)$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}+l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}^{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}+j_{ik}-l_{k2})}^{(n_{ik}+j_{ik}-l_{k2})} \sum_{(n_{sa}=n-j^{sa}+1)} \\
 & \frac{(n_{ik}-j_{ik}-l_{k1}+1)!}{(j_{ik}-l_{k1}+1)! \cdot (n_{ik}-j_{ik}-l_{k1}+1)!} \cdot \\
 & \frac{(n_{sa}-j_{sa}+1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
 & \frac{(n_{sa}-1)!}{(j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_{sa}+l+1} \sum_{j^{sa}=j_{ik}+j_{sa}^{ik}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})}^{()}
 \end{aligned}$$

GÜLDEN

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{ik}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{ik} = \sum_{k=l}^n \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left(\sum_{k=l}^{n} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{n_{sa}=n-j^{sa}+1}^{l_s+j_{sa}-l} \right)$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{n} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{n_{sa}=n-j^{sa}-l+1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik})} \sum_{(j^{sa} = l_i + n - D)}$$

$$\sum_{n_i = n + k_1}^n \sum_{(n_{ik} = n_i - j_{ik} - 1)} \sum_{(n_{sa} = n - j^{sa} + 1)}$$

$$\frac{(n_{ik} - n_{sa} - k_1)!}{(j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j^{sa} = l_i + n + j_{sa} - D - s)}^{l_s + j_{sa} - l}$$

$$\sum_{n_i = n + k_1}^n \sum_{(n_{is} = n + k_1 + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOS} = \sum_{k=l}^n \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}^s=l_{sa}+n-D}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n - j_{ik})}^{(n_i - \mathbb{k} + 1)} \frac{\binom{n_i - s - 1}{n_i - n - l - 1}}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(n - l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$2 \leq l \leq D - l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - l_{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_{sa} = l_s \wedge l_s \leq j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D > n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^i, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_{ik}, j^{sa}}^{DOST} = & \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \right. \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left(\sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{sa} - l + 1} \right. \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z^s}^{j_{sa}^{ST}} = \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{(n_i-n_{ik}-\mathbb{k}_1+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{sa}-1)!} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(l_s+j_{sa}-l)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - \mathbb{k}_1)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = j_{sa} - \mathbb{k} \wedge$$

$$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{l_{sa}}{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{sa}-l} \sum_{(n_i=n+l_{sa}-D-s)}^{n_i+l_{sa}-l} \sum_{(n_i=n+l_{sa}+j_{sa}^{ik}-j_{ik})}^{n_i+l_{sa}-l} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1})}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D > n < n \wedge l_{sa} > D - l_{sa} - 1 \wedge$

$j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} - j_{sa}^{ik}$

$n_{sa} + j_{sa}^{ik} \leq j^{sa} \leq n_{sa} + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \leq n_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D > n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
fz S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik})!} \cdot \\
&\frac{(n_i - n_{sa} - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik})!} \cdot \\
&\frac{(l_{ik} - j_{sa}^{ik})!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(D - j_{sa} - l_{sa} - s)!}{(D - j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \cdot \\
&\sum_{k=l}^{(l_s+j_{sa}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
&\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})}^{(\quad)} \\
&\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
&\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l_{sa} + 1)} \sum_{j_{ik} = l_{ik} + n - D}^{(n_{ik} - j_{sa}^{ik} - l_{sa} + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n_{sa} - j_{sa} - l_{sa} + 1)}$$

$$\frac{(n_{ik} - j_{sa}^{ik} - l_{sa} + 1)! \cdot (n_{sa} - j_{sa} - l_{sa} + 1)!}{(n_{ik} - j_{sa}^{ik} - l_{sa} + 1)! \cdot (n_{sa} - j_{sa} - l_{sa} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{(n_{is} + j_{sa}^{ik} - l_{sa} - \mathbb{k}_1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n_{sa} - j_{sa} - l_{sa} + 1)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{(n_{sa} - j_{sa} - l_{sa} + 1)} \sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}^{(n_{sa} - j_{sa} - l_{sa} + 1)}$$

GÜLDENYA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik}^{DOST} = \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_s+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n+l_k-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j_{sa}^{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOS} \sum_{j_{ik}, j_{sa}^{ik}} \sum_{l_i, l_{sa}} \sum_{j_{sa}^{ik}} \sum_{n_{ik}, n_{sa}} \frac{(l_i + j_{sa}^{ik} - D - s - 1)! \cdot (l_i + j_{sa} - l - s + 1)!}{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1) \cdot j_{sa}^{sa} = l_i + n + j_{sa} - D - s} \cdot \frac{(n_i - n_{ik} - k_1 + 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - k_2)!}{\sum_{n_{ik} = n + k} (n_{ik} = n + k_2 - j_{ik} + 1) \cdot \sum_{n_{sa} = n - j^{sa} + 1}}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

GÜLDÜZMÜNYA

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i - n_{sa} - 1)!}{(n_i + j^{sa} - n_{sa} - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDENWA

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k}$$

$$\mathbb{k} = z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{\binom{()}{l_{ik} - j_{sa}^{ik} - j_{sa}}} \sum_{\substack{() \\ j_{sa}^{ik} = l_i + n + j_{sa} - D - s}}^{l_s + j_{sa} - l} \sum_{\substack{() \\ n_i = n + k}}^{(n_i - l + 1)} \frac{(n_i - l + 1)!}{(n_i - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(n_i - s - 1)!}{(n_i - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(n_i - s - 1)!}{(n_i - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(n_i - s - 1)!}{(n_i - l)! \cdot (n - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \end{aligned}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - s)}^{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{(n_i = n + k)}^{(n_i = n + k + j_{sa}^{ik} - j_{ik} + 1)} \sum_{(n_{sa} = n_{sa} + 1)}^{(n_{sa} = n_{sa} + 1)} \frac{(n_{sa} - k_1 + 1)!}{(j_{ik} - 2)! \cdot (n_{sa} - n_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{(n_i = n + k)}^{(n_i = n + k + j_{sa}^{ik} - j_{ik})} \sum_{(n_{sa} = n_{sa} + 1)}^{(n_{sa} = n_{sa} + 1)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1, j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^l, \dots, j_{sa}^i\} \wedge$$

$$s = 5 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: \dots = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{l_{sa}}{j_{sa}^{sa} - l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_{sa} + j_{sa} - l} \sum_{(n_i = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{n_{sa} - l} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1)}^{n_{sa} - l} \sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{n_{sa} - l} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n + 1 \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n + 1 \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n + 1 \wedge l_s > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}+j_{sa}-\mathbb{k}_2)} \frac{(n_{ik}-l+1)!}{(j_{ik}-2)! \cdot (n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \frac{(n_{ik}+n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)} \frac{(n_i-s-l)!}{(n_i-n-l)! \cdot (n-s)!} \cdot \frac{(l_s-l-1)!}{(l_s+j_{sa}^{ik}-j_{ik}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{D-s} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1 \sum_{j^{sa} = l_i + n + j_{sa} - D - s}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{n_{sa} = n - j^{sa} + 1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{is}=n+l_k-j_{is}+1)}^{n_{ik}+j_{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - l_{k_1} - 1)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{sa} - l_{sa} - 1)!}{(j_{sa} - l_{sa} - 1)! \cdot (n_{sa} + j_{sa} - j_{ik} - l_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j_{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

GÜLDENWA

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z \geq 2 \wedge k = k_1 \vee k_2 \Rightarrow$$

$$\sum_{k=l}^{DOST} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j_{ik}-k_1+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-l_{sa})}^{(l_i+l-s+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{n_i=n+k}^n \sum_{(n_i-j_{ik}+1)}^{(n_{ik}+j_{ik}-k_2)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}-1)} \frac{(n_{ik}-j_{ik}-k_1+1)!}{(j_{ik}-k_1-2)! \cdot (n_{ik}-j_{ik}-k_1+1)!} \cdot \frac{(n_{sa}-1)!}{(j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()}$$

GÜLDENSA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i+l_k-j_{ik})}^{(n_i+l_k+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_2}}^{()} \sum_{(n_{ik}-j^{sa}-l_{k_2})}^{()} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s - \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee \end{aligned}$$

$$\begin{aligned} & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \end{aligned}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{POST}^{sa} = \sum_{k=l}^{n+j_{sa}^{ik}-j_{sa}-1} \sum_{j_{ik}=k+n-D}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \\
& \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^n \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_i-j_s+1)} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{ik,j_{sa}}^{DOS1} = \sum_{k=l}^{\binom{j_{sa}-l}{j_{sa}+j_{sa}^{ik}}} \sum_{n_{ik}=n+\mathbb{k}}^{\binom{n_{ik}-\mathbb{k}_1+1}{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{l-n_{ik}-\mathbb{k}_1-1}{j_{ik}-2}} \cdot \frac{(n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}{(n_{ik} - n_{sa} - 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_{sa}-l+1}^{\binom{()}{j^{sa}=l_i+n+j_{sa}-D-s}} \sum_{n_i=n+\mathbb{k}}^{\binom{()}{n_i-j_s+1}} \sum_{n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik}}^{\binom{()}{n_i-j_s+1}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{lk} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} -$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} \sum_{k=l}^{OST} \sum_{j_{ik}, j^{sa}} &= \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_s + n + j_{sa}^{ik} - D - 1)} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \end{aligned}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n - j_{ik})}^{(n_i - \mathbb{k} + 1)} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1 - \mathbb{k}_2)}^{(\quad)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + \dots - \dots$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > \dots \wedge$$

$$j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$j_{sa}^{ik} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})}^{(\quad)} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_i + j_{sa} - l - s + 1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_i - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_i - l - j_{sa} - s)!}{(l_i - j^{sa} - n - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{\binom{D-l-j_{sa}}{l}} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{D-l-j_{sa}}{l}} \sum_{j_{sa}^{ik}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{\binom{D-l-j_{sa}}{l}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{\binom{D-l-j_{sa}}{l}} \\
 & \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$l_i \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_{ik} + 1)}^{(n_i - j_{ik} + 1)} \sum_{(n_{ik} = n_{ik} - \mathbb{k}_2)}^{(n_{ik} + j_{ik} - \mathbb{k}_2)}$$

$$\frac{(n_{ik} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(n_{ik} + j_{ik} - n_{sa} - j_{sa}^i)!}$$

$$\frac{(n_{sa} - 1)!}{(j_{sa}^i - n - 1)! \cdot (n - j_{sa}^i)!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa}^i - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - I)!}{(n_i - n - I)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z \geq 2 \wedge k = k_1 \vee k_2 \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_s + j_{sa} - l} j^{sa} = l_{sa} + n - D$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(j_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=l_s + n + j_{sa}^{ik} - D}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa}=l_s + j_{sa}^{ik} - l + 1}^{(l_s + j_{sa}^{ik} - l)} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{ik}=n+l_k+j_{sa}^{ik}-j_{ik}+1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa}=n - j_{sa}^{ik} + 1}^{n_{ik} + j_{ik} - j_{sa}^{ik} - l + 1} \\
 & \frac{(n_{ik} - n_{ik} - l_{k_1})!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(j_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{j_{ik}=j^{sa} + j_{sa}^{ik} - j_{sa}}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa}=l_i + n + j_{sa} - D - s}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k+j_{sa}^{ik}-j_{ik}}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik}=n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - l_{k_1}}^{()} \sum_{n_{sa}=n_{ik} + j_{ik} - j^{sa} - l_{k_2}}^{()}
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1, j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s: 5 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{j_{sa} - j_{sa}^{ik} - l} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{j_{sa} - j_{sa}^{ik} - l} \\
 & \sum_{n_i = n + k}^n \sum_{n_{ik} = n + k_2}^{j_{ik} - 1} \sum_{n_{sa} = n - j^{sa} + 1}^{j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - j_{sa})! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{j_{sa} - j_{sa}^{ik} - l} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{j_{sa} - j_{sa}^{ik} - l} \\
 & \sum_{n_i = n + k}^n \sum_{n_{is} = n + k + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)}
 \end{aligned}$$

GÜLDENWA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_1 + z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z^{\mathcal{S}^{DOST}}_{j_{ik}, j^{sa}} = \sum_{k=l}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_s+j_{sa}-l} \sum_{j^{sa}=j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = l_s + j_{sa}^{ik} - l + 1}$$

$$\sum_{n_i = n + k_1}^n \sum_{n_{ik} = n_{ik} - k_1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j_{sa}^{ik} + 1}^{n_{ik} + j_{ik} - k_2}$$

$$\frac{(n_{ik} - n_{ik} - k_1)!}{(j_{ik} - k_1)! \cdot (n_{ik} - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{j_{sa} = j_{sa}^{ik} - j_{sa}}^{l_s + j_{sa} - l} \sum_{j^{sa} = j_{sa} + 1}$$

$$\sum_{n_i = n + k_1}^n \sum_{n_{is} = n + k_1 + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{()} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}$$

GÜLDENWA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 =$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{sa}=j_{sa}+1)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\begin{aligned}
& \left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{sa} + 2}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \right. \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\cdot)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n=n+\mathbb{k}}^n \sum_{(n_{is}=n-\mathbb{k})}^{(n_i-1+1)} \sum_{(n_{ik}=j_{sa}-\mathbb{k}_2)}^{(n_{ik}=j_{sa}-\mathbb{k}_1)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(n - l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$
- $j_{ik}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + \dots \leq j_{sa} \leq \dots + j_{sa} - s \wedge$
- $l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $l_{sa} \leq D + j_{sa} - n \wedge$
- $D > n \wedge I = \mathbb{k} > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
- $s \in \{j_{sa}^i, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$
- $s \geq 5 \wedge s = s + \mathbb{k} \wedge$
- $\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
f_z S_{j_{ik} j_{sa}}^{DOST} = & \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\
& \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_s+j_{sa}^{ik}-j_{sa}-1} \sum_{j_{sa}=j_{sa}+2}^{l_s+j_{sa}-l} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - k_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-1)}$$

$$\sum_{n+l}^{(n_i-n_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-n_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \left(\frac{(D - j_{sa} - l_{sa} - s)!}{(n + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l-1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(n_i - s - I)!}{(n_i - n - I)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOST} = \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{l_{sa} - l + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_{sa} - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{l_{sa} - l + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \right)$$

$$\begin{aligned}
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - n_{sa} - 1)!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - j_{sa}^{ik})!}{(D + j^{sa} - n - j_{sa}^{ik} - l_{sa} - j_{sa}^{ik} - s)!} \cdot \\
& \sum_{k=0}^{(j_{sa}^{ik}-l)} \sum_{l_{ik}=j_{sa}^{ik}+1}^{n} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \\
& \sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1}^{n} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_i-j_s+1)} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$n_i \geq n - l_i \wedge l_i \neq 0 \wedge l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} - j_{sa} + j_{ik} - j_{sa}^{ik} - l + 1)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} - l + 1)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}^{(n_i - j_{ik} + 1)} \sum_{(n_{sa} = n - j_{sa} + 1)}^{(n_{ik} + j_{ik} - \mathbb{k}_2)}$$

$$\frac{(n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

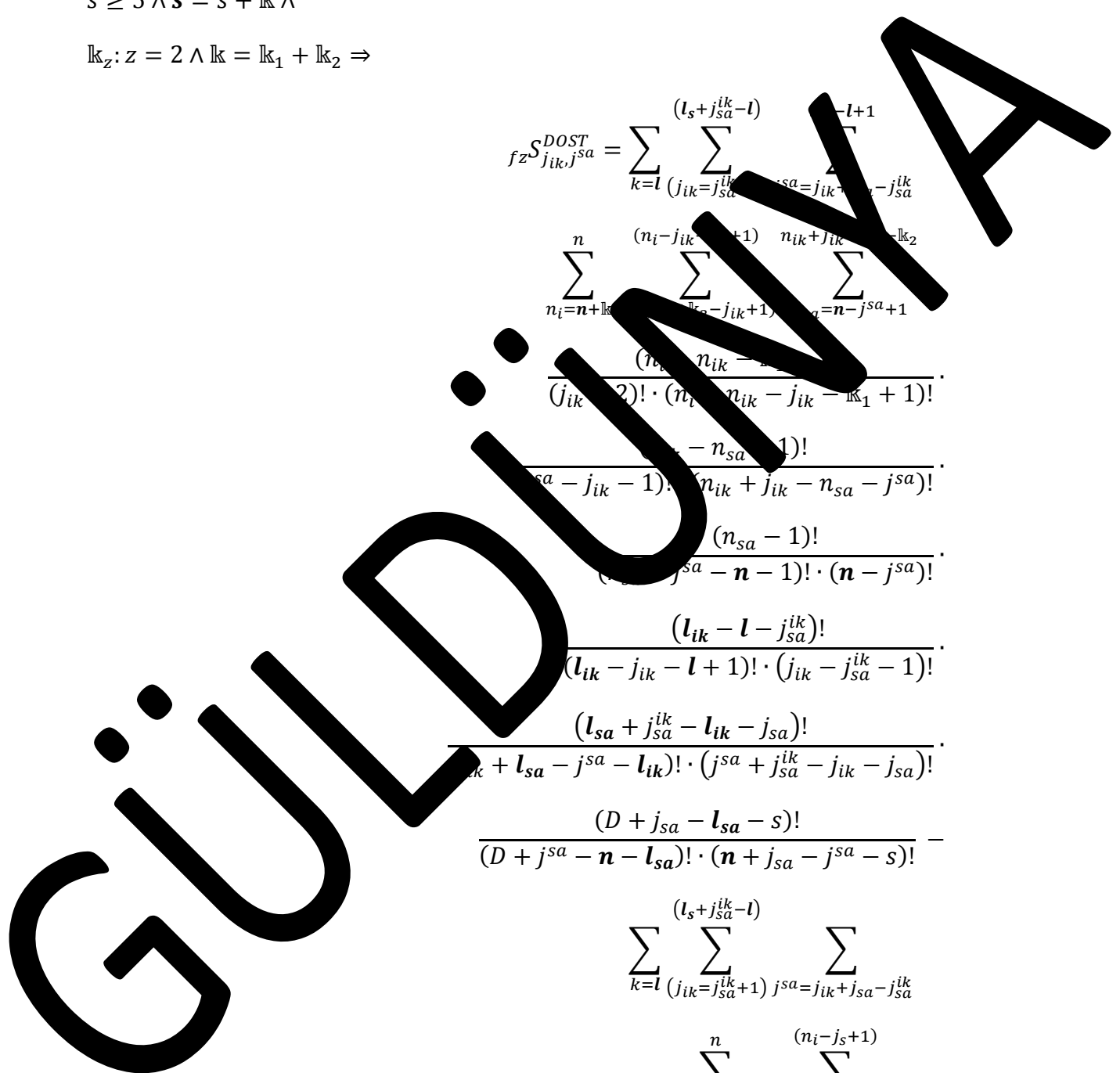
$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()}$$



$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{ik, j^{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \right)$$

$$\begin{aligned}
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik}} \sum_{j_{sa} = n - D}^{j_{sa} - l - j_{sa}^{ik}} \right. \\
& \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_1 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
& \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
& \left. + \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right) + \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
& \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
& \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}
\end{aligned}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(l_{ik}=l+n+j_{sa}-D-j_{sa}^{ik})}^{()} \sum_{(j_s+1)}^{()} \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n - 1 \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$D + l_{sa} + j_{sa} - j_{sa}^{ik} + 2 \leq l \leq i - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

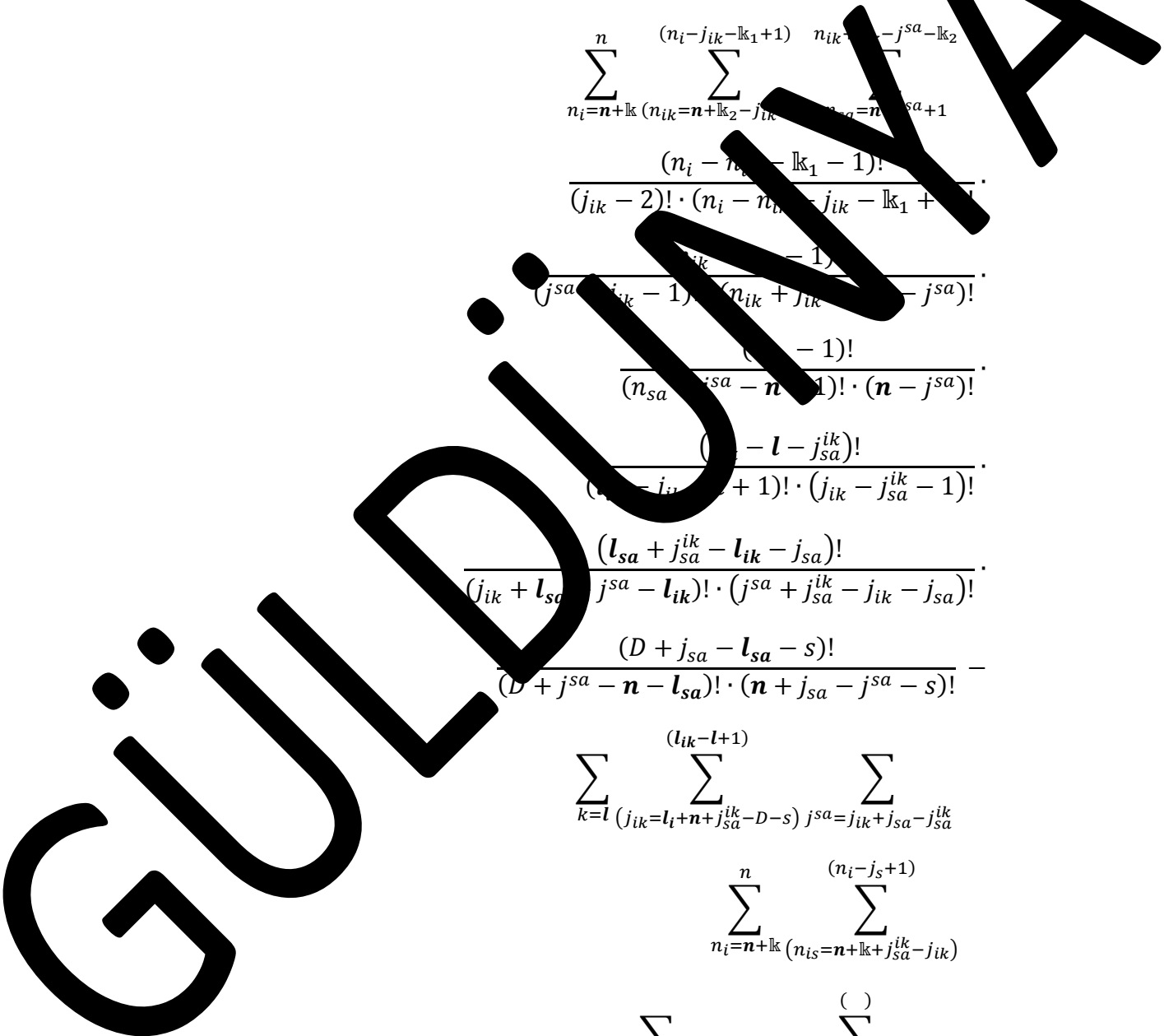
$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z \mathcal{S}_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n}^{n} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}, n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \frac{(j_{sa}^{ik}-j_{ik}-1)!}{(n_{ik}+j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(n_{sa}+j_{sa}-n-1)!}{(n-j_{sa})!} \cdot \frac{(n_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa})^{j_{sa}-l_{ik}} \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i-s-l)!}{(n_i-n-l)! \cdot (n-s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{\binom{()}{(j^{sa}=l_{sa}+n-D)}} \sum_{\binom{()}{(n_i-j_{ik}-k_1+1)}} \sum_{\binom{()}{(n_{ik}+j_{ik}-j^{sa}-k_2)}} \sum_{\binom{()}{(n_{sa}=n-j^{sa}+1)}} \right)$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}$$

$$\sum_{n_i = n + \mathbb{k}_k}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}_k}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_s - a - l} \dots$$

$$\sum_{n+l_k}^{(n_i - j_s)} \sum_{(n_{i_s} + l_k + j_{sa}^{ik} - j_{ik})} \dots$$

$$\sum_{n_{ik}=n_{i_s}+j_{sa}^{ik}-l_{k_1}}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \dots$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l = l \wedge l_s \geq D - n - 1 \wedge$
- $D + l_{sa} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq l - 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 = j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $j_{sa}^{ik} - j_{sa} < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$
- $D \geq n < n \wedge l = l_k > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D} \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 &\frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 &\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 &\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - \mathbb{k}_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \\
 &\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{l=1}^{(l_{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j^{sa})!} \\
& \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j_{sa}=j_{sa}+j_{sa}-j_{sa}^{ik}} \sum_{n; n+l_k}^n \sum_{(n_{is}=n+l_k-j_{ik})}^{(n_{is}+1)} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{ik}-l_k)}^{(n_{ik})} \sum_{(j_{sa}=j_{sa}-l_{k_2})}^{(j_{sa})} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $D \geq n < n \wedge l = 1 \wedge l_s \leq D - n - 1 \wedge$
- $2 \leq l \leq D - l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + \dots = l_s \wedge l_s \cdot j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$
- $D \geq n < n \wedge l = k > 0 \wedge$
- $j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$
- $s \geq 5 \wedge s = s + k \wedge$
- $k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$\begin{aligned}
f_z S_{j_{ik}, j^{sa}}^{DOST} = & \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \right. \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left(\sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{sa} - l + 1} \right. \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n-l_{k_2}-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-1)}$$

$$\sum_{n+l}^{(n_i-n_{ik}-k_1+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-n_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i-s-l)!}{(n_i-n-\mathbb{k})! \cdot (n-s)!}$$

$$\frac{(l_s-l-1)!}{(l_s+j_{sa}^{ik}-j_{ik}-l)! \cdot (l_s-l-1)!}$$

$$\frac{(D-l_i)!}{(D+j^{sa}+s-n-l_i-j_{sa})! \cdot (n-l_i-j^{sa}-s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq l_s + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i_s} - 1 \wedge j_{sa}^{l_s} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}^{i_s}, j_{sa}^i\} \wedge$$

$$s \geq l_s \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{DOSt}}} = \sum_{k=l}^{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik})} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{(n_{is} + l_k) (n_{is} = n + l_k + j_{sa}^{ik} - j_{ik})} \dots$$

$$\sum_{(n_{is} + j_{sa}^s - j_{sa}^{ik})} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - l_{k_2})}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{zS}^{DOST}_{j_{ik}, j_{sa}} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - l_{sa})} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik} + j_{sa} - l - s + 1} \sum_{n_i = n + k}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{sa} - k_2 - j_{sa} - 1)} \frac{(n_i - n_{ik} - k_1 - 1)!}{(n_i - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n - 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{n} \sum_{n_i = n + k}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\begin{aligned}
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa}^{ik} - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} - j_{sa}^{ik})} \sum_{(j_{ik} - j_{sa}^{ik} - j_{sa}^{ik})}^{(j_{ik} - j_{sa}^{ik} - j_{sa}^{ik})} \sum_{(j_{ik} - j_{sa}^{ik} - j_{sa}^{ik})}^{(j_{ik} - j_{sa}^{ik} - j_{sa}^{ik})} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(j_{ik} - j_{sa}^{ik} - 1)} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$(D > n - n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOS1} = \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{(l_i+n+1 \leq l \leq D-s-1)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)} \sum_{(j_{sa}^{ik}=l-s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^n \sum_{(j_{ik}-\mathbb{k}_1+1)}^{j_{ik}-\mathbb{k}_1+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

GÜLDÜNKYA

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik})!} \cdot \\
 & \frac{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik})!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})}^{()} \\
 & \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!}
 \end{aligned}$$

GÜLDEN

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} - j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_i + j_{sa} - l - s + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n - n_{sa} - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l_{sa} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_i + n + j_{sa} - D - s} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)} \\
 & \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDEN

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{sa}^{ik}}^{DOST} = \sum_{k=l}^{n+j_{sa}^{ik}-D-s+1} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}^{ik}-s+1} \sum_{j=l_i+n+j_{sa}-D-s}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i - j_{ik} - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \\
 & \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDENWA

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz_{k_1, j_{sa}}^{DOST} = \sum_{k=l}^{\binom{D+l-j_{sa}-s}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}^{ik}=j_{sa}+1}^{\binom{l_{ik}+j_{sa}-j_{sa}^{ik}+1}{j_{sa}^{ik}=j_{sa}+1}} \sum_{n_i=n+k}^{\binom{n_i-j_{ik}-k_1+1}{n_{ik}=n+k_2-j_{ik}+1}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{n_{ik}+j_{ik}-j_{sa}-k_2}{n_{sa}=n-j_{sa}+1}} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{D+l-j_{sa}-s}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}^{ik}=j_{sa}+1}^{\binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}^{ik}=j_{sa}+1}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - \mathbb{k}_1) \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$

$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s = \{j_{sa}^s, \dots, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}^s, \dots, j_{sa}^i\} \wedge$

$s \geq l \wedge s = s + \mathbb{k}$

$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}, j_{sa}^{ik}=l_i+n+j_{sa}-D-k+1)}$$

$$\sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} + j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

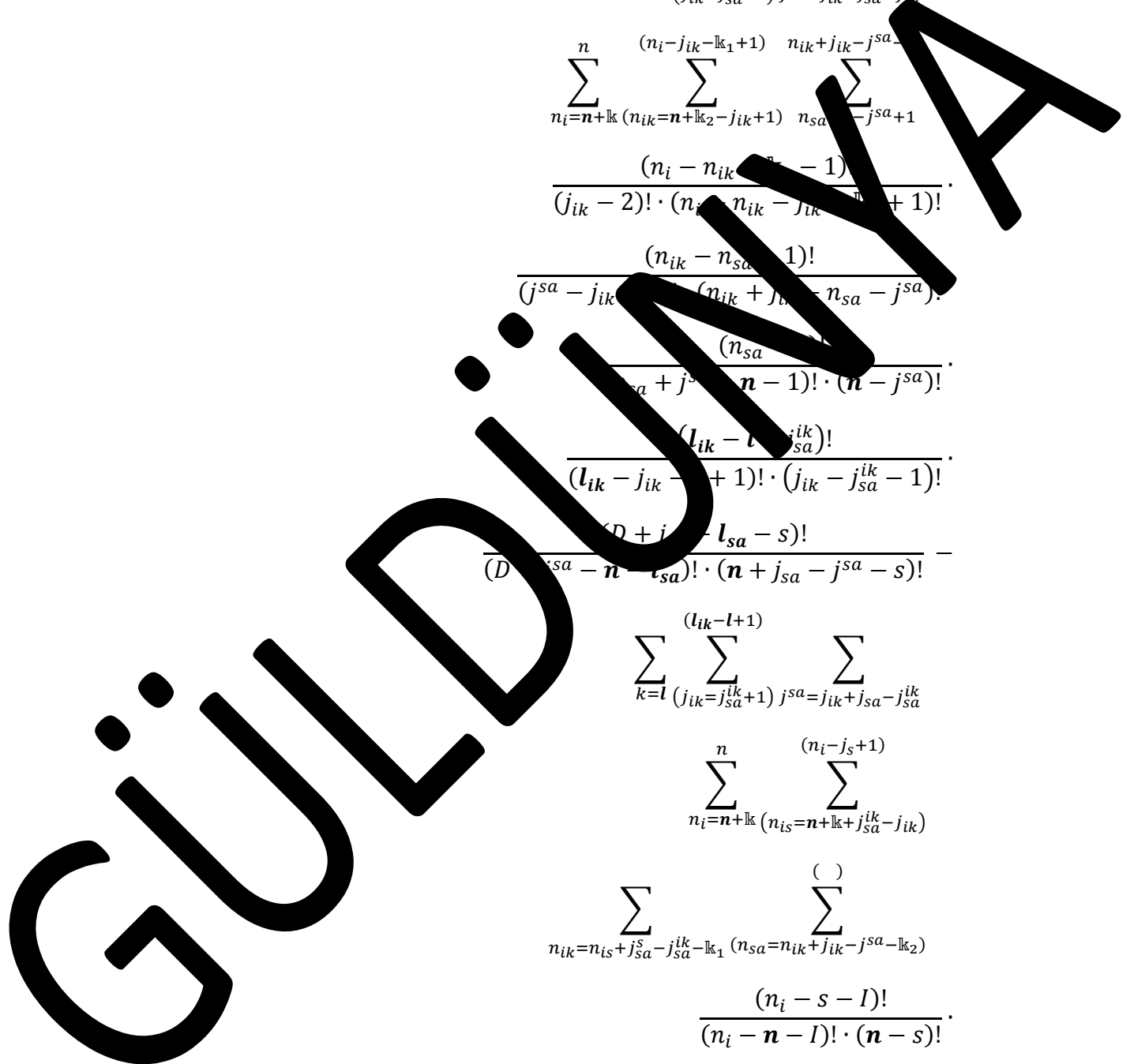
$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$



$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(n_i-j_{sa}^{ik}-k_1+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(D + j_{sa} - l_{sa} - s)!} \cdot \frac{1}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(n_{ik}=n+k_2-j_{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_{sa}=n-j_{sa}+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-s-l)!}{(n_i-n-\mathbb{k})! \cdot (n-s)!}$$

$$\frac{(l_s-l-1)!}{(l_s+j_{sa}^{ik}-j_{ik}-l)! \cdot (l_s-l-1)!}$$

$$\frac{(D-l_i)!}{(D+j^{sa}+s-n-l_i-j_{sa})! \cdot (n-l_i-j^{sa}-s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i - j_{sa} - s > 0 \wedge$

$D + s - n < l_i \leq D + l_s - s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}^s, \dots, j_{sa}^i\} \wedge$

$s \geq 1 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-l_{sa})} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_s+1)} \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{l=1}^{(j_{sa}^{ik} - j_{sa})} \sum_{\substack{j_{sa} = j_{sa} + 1 \\ (n_{ik} - \mathbb{k}_1 + 1) \leq j_{sa} \leq (n_{ik} - \mathbb{k}_2 + 1)}} \sum_{\substack{n_i = n + \mathbb{k} \\ (n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}} \sum_{n_{sa} = n - j_{sa} + 1}^{(j_{sa}^{ik} - j_{sa})} l_{ik} + j_{sa} - \mathbb{k} + 1$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n_{sa} + j_{sa}^{ik} - j^{sa} - s)!} \cdot \sum_{k=l}^{n_{ik} + j_{sa}^{ik} - j_{sa}^{ik}} \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{n_{ik} + j_{sa}^{ik} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - \mathbb{k}_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n - n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}+1}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1})} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_2})} \frac{(l_s-l+1)!}{(l_s+l_{sa}-j_{sa}^{ik}-l)! \cdot (j_{sa}^{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(n+l-s)!}{(D+l-s-n)! \cdot (n+l-s)!} \cdot \frac{(D-l)!}{(D+l-s-n-l)! \cdot (n+l-s-j_{sa}^{ik}-s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1)$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n - l_i \leq D + l_s + s - n - 1)$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n - l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$l_{sa} \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 &\frac{(l_{sa} + j_{sa}^{ik})! (l_{ik} - j_{sa})!}{(l_{sa} - j_{sa} - l_{ik})! (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}^{(n_i+l+1)}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{is}=n+l-k)}^{(n_i+l+1)} \sum_{(j_{ik})}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-k_1}^{(n_i+l+1)} \sum_{(j_{sa}-k_2)}^{(n_i+l+1)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_{sa} \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_i \neq l_s \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l_i = l_s > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}^{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!}$$

$$\frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}-n_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j_{sa}^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq l_i < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(j_{sa}+j_{sa}^{ik}-j_{sa}) l_{ik}+j_{sa}^{ik}+1} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik}-\mathbb{k}_1-j_{ik}+1) j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=0}^{\binom{()}{j_{sa} - l}} \sum_{j_{ik}=j^{sa}+k}^{\binom{()}{j_{sa} - l}} \sum_{j_{sa}=j^{sa}+1}^{\binom{()}{j_{sa} - l}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{()}{j_{sa} - l}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik})} \sum_{(j_{sa}^{sa+1})} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}^{sa}-\mathbb{k}_2)}^{(n_{sa}=n-j_{sa}^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}^{sa}-n-1)! \cdot (n-j_{sa}^{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

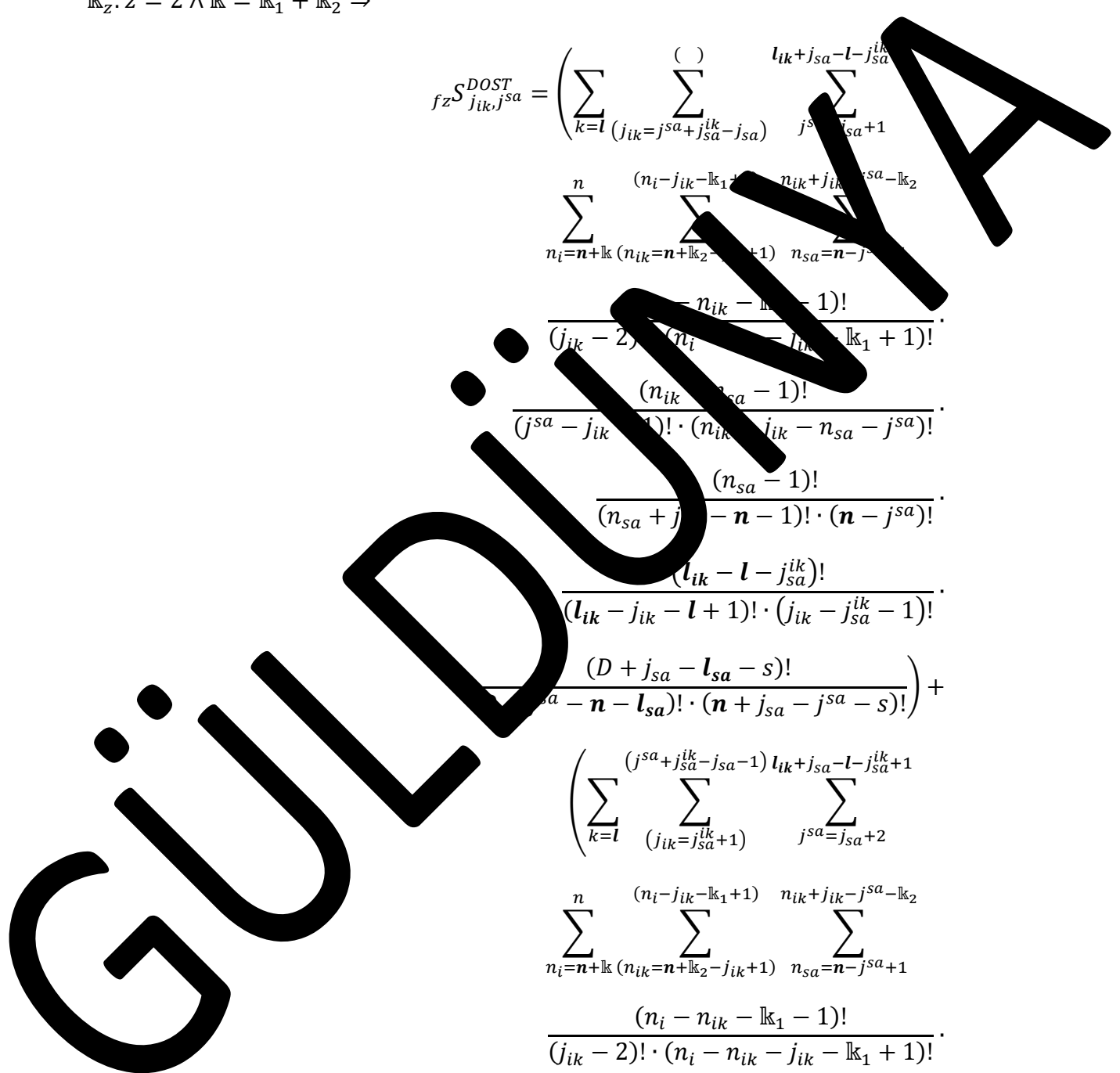
$$\left. \frac{(D+j_{sa}-l_{sa}-s)!}{(j_{sa}^{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}^{sa}-s)!} \right) +$$

$$\left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j_{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j_{sa}^{sa+2})}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}^{sa}+1)}^{(n_{sa}=n-j_{sa}^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}^{sa}-n-1)! \cdot (n-j_{sa}^{sa})!}$$



$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}+1} \sum_{(j_{sa}+j_{sa}^{ik}-j_{sa}^{ik}+2)}^{l_{sa}+1} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_{ik}-l_{ik}+1)}^{(n_i-j_{ik}-l_{ik}+1)} \sum_{(n_{ik}+j_{ik}-l_{ik_2})}^{(n_{ik}+j_{ik}-l_{ik_2})} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}=n-j^{sa}+1)} \\
 & \frac{(n_{ik}-l_{ik}+1)!}{(j_{ik}-l_{ik}+1)! \cdot (n_{ik}-n_{ik}-j_{ik}-l_{ik_1}+1)!} \cdot \\
 & \frac{(n_{sa}-l_{sa}+1)!}{(j_{sa}-l_{sa}+1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
 & \frac{(n_{sa}-1)!}{(j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{ik_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{ik_2})}^{()}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 =$$

$$f_z S_{j_{sa}^{ik}}^{D_0} = \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) + \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned}
 & \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)!}{(n_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - n_{sa} - s)!}{(D + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \\
 & \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\left((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} \sum_{z \in \text{DOST}} j_{ik} j_{sa}^{ik} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n: n+l_k}^n \sum_{(n_{is} = n - j_{ik})}^{(n_i - l_k + 1)}$$

$$\sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - l_{k_1} - l_{k_2})}^{(\cdot)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n - 1 \wedge$$

$$2 \leq l \leq D - j_{sa} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + j_{sa}^{ik} \leq l_s \wedge l_s \leq j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D - j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_{ik}, j^{sa}}^{DOST} = & \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \left. \frac{(D + l_{sa} - l_{sa})!}{(D + l_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{lk}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{(j^{sa}+j_{sa}-j_{sa}^{lk}-1) l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_k+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - l_k - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - l_k + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} + j_{sa} - n - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik})! \cdot (l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} j^{sa}=l_i+n+j_{sa}-D-s$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_k} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_k)}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{i=1}^{(l_{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l)} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\begin{aligned}
& \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \right. \\
& \sum_{n_i=n+l_{k_1}}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j^{sa})!} \\
& \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_{k_1}}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = i + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n=n+l}^n \sum_{(n_{is} = n - l + k)} (n_i - s + 1) j_{ik}$$

$$\sum_{(n_{ij} = n_{is} + j_{sa}^{ik} - k_1)} (n_i - s - l)!$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$j_{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq n + j_{sa}^{ik} - 1 \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n - l_{ik} \leq D - l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D > n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^{i-1}, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik} j_{sa}}^{DOST} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - 1)!} \cdot \\
 &\frac{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_{sa} - l_s)!}{(D + j_{sa} - n - l_{sa} - l_s)! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \cdot \\
 &\sum_{k=l}^{(l_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})} \sum_{(j_{sa}^{ik})} \\
 &\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_j)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

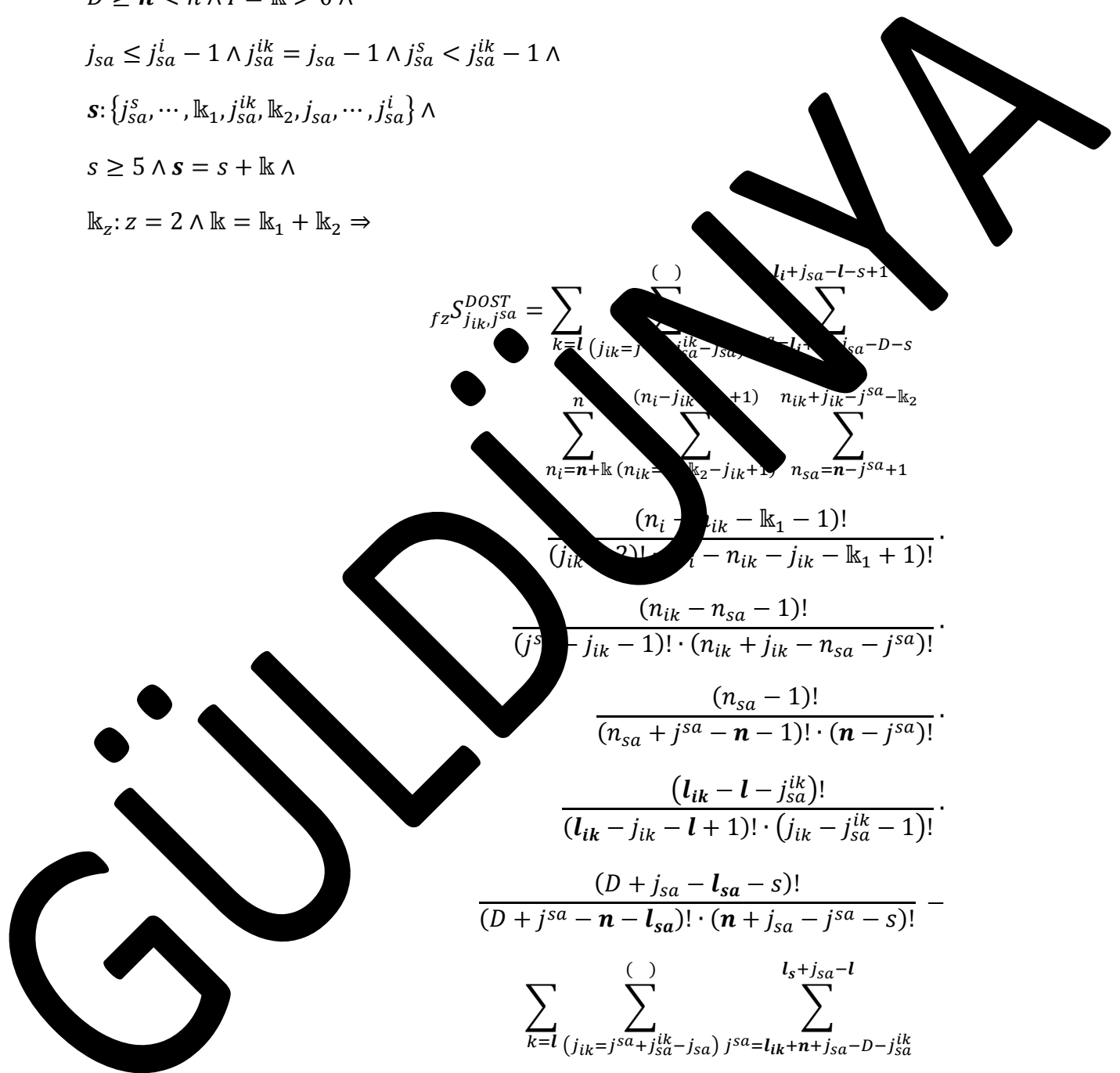
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{lk}-j_{sa})}^{(\quad)} \sum_{(l_i+j_{sa}-l-s+1)}^{(\quad)} \sum_{(j_{sa}-D-s)}^{(\quad)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_{ik_2}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \frac{(n_i - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{lk}-j_{sa})}^{(\quad)} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(l_s+j_{sa}-l)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = j_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1$$

$$\mathbb{k}_1 + z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n, n+k}^n \sum_{(n_{is} = \dots)}^{(n_i + 1)} \dots (j_{ik})$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1}^{(\dots)} \sum_{(n_{ik} = j_{sa} - k_2)} \dots \frac{(n_i - s - 1)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\dots \frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(n - l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - l$$

$$l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n - l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D > n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{l, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{sa})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\frac{(D + j_{sa}^{sa} - l_{sa} - s)!}{(D + j_{sa}^{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_i+j_{sa}-l-s+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(\)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=l_{sa}+n-l}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l}^n \sum_{(n_i-s+l-j_{ik})}^{(n_i-s+l-1)}$$

$$\sum_{n_{ik}=n_i+j_{sa}-l_{sa}-l_{k_2}}^{(\)} \sum_{(n_i-s+l-j_{ik})}^{(\)} \frac{(n_i-s+l-1)!}{(n_i-s+l-j_{ik})! \cdot (n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq l_{sa} + j_{sa}^{ik} - l_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq l_{sa} \leq n + j_{sa} - j_{sa}^{ik} -$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - l_{sa} < l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D > n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \geq 5, \{k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_{ik} j_{sa}}^{DOST} = & \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa}^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(j_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{sa} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa}^{sa} - l_{sa} - s)!}{(D + j_{sa}^{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa}^{sa} - s)!} + \\
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa}^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{sa} - 1)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n: n+k}^n \sum_{(n_{is} = n + k)}^{(n_i + 1)} \sum_{(j_{ik})}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1}^{(n_i - s - l + 1)} \sum_{(j_{sa} - k_2)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \neq l_s \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l_i = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}^a=j_{sa}+1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(j_{ik}-2)! \cdot (n_i-j_{ik}-\mathbb{k}_1+1)!}{(j_{sa}-j_{ik}+1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!}$$

$$\frac{(n_{sa}-1)!}{(l_{ik}-l-j_{sa}^{ik})!}$$

$$\frac{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}{(D+j_{sa}-l_{sa}-s)! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}^a=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i-s-l)!}{(n_i-n-l)! \cdot (n-s)!}$$

$$\frac{(l_s-l-1)!}{(l_s+j_{sa}^{ik}-j_{ik}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

GÜLDÜŞMÜŞA

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} f_{z^s} j_{sa}^{ST} &= \sum_{k=l}^n \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-l+1} \\ &\sum_{i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\ &\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\ &\sum_{k=l}^n \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \end{aligned}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^s + s - n - l - j_{sa}^{sa})! \cdot (n - j_{sa}^s - j_{sa}^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_{ik} + j_{sa}^{ik} - n - 1) \wedge$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa}^{ik} - n < l_{ik} \leq D + l_{ik} + j_{sa}^{ik} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^{ik}, j_{sa}^{ik}, l_{k_1}, j_{sa}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 &\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 &\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_{ik} - j_{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_{sa} - l - s)!}{(D - j^{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 &\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 &\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 &\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{(\quad)} \\
 &\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^k - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2$$

$$f_{z, k, j_{sa}}^{DST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}^{l_s + j_{sa} - l}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = l + j_{sa} - l + 1}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{sa} = n_i + j_{sa} - j_{ik} - k_2)}^{(n_{ik} + j_{sa} - j_{sa} - k_2)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - j_{sa} - k_1 - 1)! \cdot (n_i - n_{ik} - j_{sa} - k_1 + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

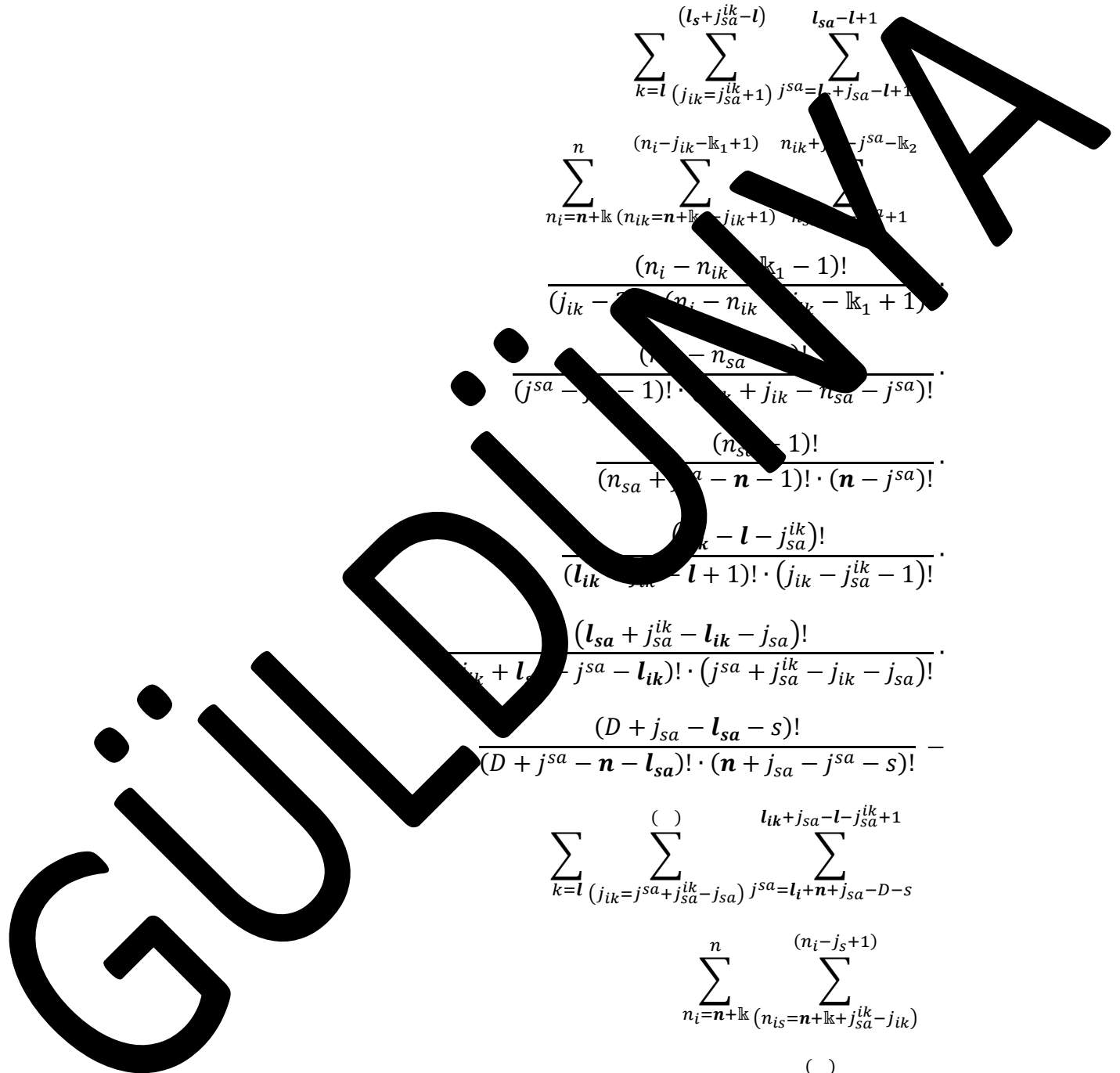
$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})}^{()} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{k_1}, k_2, j_{sa}^{k_2}, \dots, j_{sa}^{i_k}\} \wedge$$

$$s \geq 1 \wedge s = s + k \wedge$$

$$k_z: z = z + k, k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}^{n} \sum_{(n_i - j_{ik} - k_1 + 1)}^{n_{ik} + j_{ik} - j^{sa} - k_2} \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_i - n_{ik} - k_1 - 1)!} \cdot (j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{k=l}^{(1+j_{sa}^{ik}-l)} \sum_{n_{sa}=l_{sa}+n+...-D-j_{sa}}^{l_{sa}-l+1} \dots$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_{sa}-j_{ik}+1)}^{(n_i-j_{ik}-l_{sa}-1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k2}}$$

$$\frac{(n_i - n_{ik} - l_{k1} - 1)!}{(j_{ik} - l_{k1})! \cdot (n_i - n_{ik} - j_{ik} - l_{k1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

GÜLDENWA

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{lk}-l_{k1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{lk})}^{(\quad)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i) \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i) \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{ik} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq (l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i) \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i) \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{i,j_{ik},j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{l_{ik}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n-D}^{n-D} \sum_{n_i=n+k}^n \sum_{n_{ik}=n_{ik}-k_2-j_{ik}+1}^{(n_i-j_{ik}-k_2+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - j_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_s - l + j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik} - 1)! \cdot (j^{sa} + j_{ik} - j_{sa})!} \cdot \\
 & \frac{(n_i + j_{sa} - n - s)!}{(n + j^{sa} - n - 1)! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^n \sum_{(j_{ik} - j_{sa}^{ik} - j_{sa})}^{(j_{ik} - j_{sa}^{ik} - j_{sa})} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
 & \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > \mathbb{k} \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa}^l - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^l, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^s\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 = \mathbb{k}_1 - 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{l=1}^{(l_{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-j_{sa}}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - (n_i - j_s + 1))}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1}^{(\cdot)} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - k_2)}^{(\cdot)}$$

$$\frac{(l_i - 1)! \cdot (n - l)! \cdot (n - s)!}{(l_s - l)! \cdot (j_{sa}^{ik} - 1)! \cdot (j_{sa}^{ik} - 1)!}$$

$$\frac{(D - 1)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - 1 < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - j_{sa} \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D + j_{sa}^{ik} - 1 < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$

$D + j_{sa} - 1 < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{j_{sa}^{ik}=l_i+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}} \sum_{n_i=n+k}^{(n_i=j_{ik}-k_1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{sa}=n-k_2)} \dots$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(n_i - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{j_{ik}=j_{sa}^s+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{j_{sa}^{ik}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+k}^n \sum_{n_{sa}=n+k+j_{sa}^{ik}-j_{ik}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2}^{(\quad)}$$

GÜLDÜZÜMÜYA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l = l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left(\sum_{k=1}^{\mathbb{k}} \sum_{l=1}^{\binom{(\cdot)}{k}} \sum_{j_{sa}^{sa}=j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \right) + \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\begin{aligned}
 & \left(\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{()} l_{sa} - i^{l+1} \sum_{j^{sa}=j_{sa}+1} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa})!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i - j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{()} \sum_{j^{sa}=j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - s - l_k)!}{(n_i - n - l_k)! \cdot (n - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{zS}^{DOST}_{j_{ik}, j_{sa}} = \left(\sum_{k=1}^n \sum_{i^l (j_{ik}=j_{sa}^{ik})} \binom{()}{l} \sum_{j_{sa}=l_{ik}+j_{sa}-i^l-j_{sa}^{ik}} \binom{()}{l} \sum_{j_{sa}=l_{sa}+n-D} \binom{()}{l} \sum_{j_{sa}=l_{sa}+n-D} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(j_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) +$$

$$\left(\sum_{k=1}^n \sum_{i^l (j_{ik}=j_{sa}^{ik})} \binom{()}{l} \sum_{j_{sa}=l_{sa}+n-D} \binom{()}{l} \sum_{j_{sa}=l_{sa}+n-D} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S j_{sa}^{ST} = \sum_{k=i}^n \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{sa}^{sa}=j_{sa})} \sum_{(l_{sa}=i^{l+1})} \sum_{(n_i=n+\mathbb{k})}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=i}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{\binom{()}{l}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(D - l)!}{(D + s - l)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, l_{k_2}\} \wedge$$

$$s \geq 5 \wedge s = s + l \wedge$$

$$l_{k_2}: z \geq 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^{\binom{()}{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}}^{l_{sa}-l+1} \sum_{n_i=n+l}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i^l}^{\binom{()}{i^l}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}^{sa}} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{\binom{()}{n_i-n+l_k}} \sum_{n_{sa}=n-l_{k_2}}^{\binom{()}{n_i-n+l_k}} \frac{(n_i - n - l_{k_1})!}{(n_i - n - l_{k_1})! \cdot (n - s)!} \cdot \frac{(D + s - n - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = i^l > 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{l_{k_1}}, \dots, j_{sa}, \dots, i^l\} \wedge$$

$$s \geq 5 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + 1 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i^l}^{\binom{()}{i^l}} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=j_{sa}}^{l_{ik}+j_{sa}-i^l-j_{sa}^{ik}+1} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{\binom{()}{n_i-n+l_k}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=0}^{(j_{ik} - j_{sa}^{ik})} \sum_{j_{sa}^{ik} = k}^{(j_{ik} - j_{sa}^{ik})} \binom{j_{ik} - j_{sa}^{ik}}{k}$$

$$\sum_{n_i = n + \mathbb{k}}^n \binom{n}{n_i} \binom{n_i}{n_i - j_{ik} - \mathbb{k}_1} \binom{n_i - j_{ik} - \mathbb{k}_1}{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{ik} - j_{sa} \wedge$$

$$j_{sa} + j_{sa} - j_{sa} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s - l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > \mathbb{k}_1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s \geq s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 \cdot 2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=i^l}^{(l_{sa} + j_{sa}^{ik} - i^l - j_{sa} + 1)} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - j_{ik} - l_s + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(j_{sa} - l_s - s)!}{(D + s - n - 1)! \cdot (n - s)!}$$

$$\sum_{k=i}^{()} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq l_i \wedge n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_s > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{sa} \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{ik}-i+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - n_{sa} - 1)! \cdot (n_{sa} - j^{sa})!}$$

$$\frac{(l_{ik} - 1 - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - j_{sa} - l_{sa} - s)!}{(D + i - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(\quad)} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^n \sum_{l=j_{sa}^{ik}}^{(l_{sa} + j_{sa}^{ik} - i l - j_{sa} + 1)} \sum_{j_{sa}^{ik} = j_{sa}}^{(j_{sa} - j_{sa}^{ik} - j_{sa} + 1)} \sum_{j_{sa} = j_{sa} - j_{sa}^{ik}}^{(j_{sa} - j_{sa}^{ik} - j_{sa} + 1)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{n_{ik} = n_i - j_{ik} - 1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1)!}{(j_{ik} - j_{ik} - i l + 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(n_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^n \sum_{l=j_{sa}^{ik}}^{(\quad)} \sum_{j_{sa} = j_{sa}}^{(\quad)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{n_{ik} = n_i - j_{ik} - \mathbb{k}_1 + 1}^{(\quad)} \sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\left((D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + l \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2}$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^{l_{ik}-i^{l+1}} \sum_{(j_{ik}=j_{sa}^{ik})} l_{sa-i^{l+1}} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_{k_2}}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=i}^n \sum_{l}^{()} (j_{ik}=j_{sa}^{ik}) \sum_{j_{sa}=j_{sa}^{ik}}^{()} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_i - n_{ik} - \mathbb{k}_1)! \cdot (n - s)} \cdot \frac{(D + s - n - l)!}{(n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq j_{ik} + j_{sa} - s$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = i > 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{l_{sa}}, \dots, j_{sa}, \dots, i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k}_1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \dots = \mathbb{k}_1 + 1 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=i}^n \sum_{l}^{()} (j_{ik}=j_{sa} + j_{sa}^{ik} - j_{sa}) \sum_{j_{sa}=j_{sa}^{ik}}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \right)$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \cdot$$

$$\left(\sum_{k=i^l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1) \wedge (n_{ik} - j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}+1}^{n_{ik} - j_{ik} - j_{sa} - \mathbb{k}_2} \right)$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_{ik}-j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}-j^{sa}+1}$$

$$\frac{(n_{ik} - j_{ik} - i^l - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=i^l}^{(l_{ik} - i^{l+1})} \sum_{(j_{ik}=j_{sa}^{ik})}^{l_{sa} - i^{l+1}} \sum_{j^{sa}=l_{ik}+j_{sa}-i^l-j_{sa}^{ik}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

GÜLDENWA

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!}$$

$$\frac{\binom{D + j_{sa} - n - l_{sa} - j_{sa}^{ik}}{(D + j_{sa} - n - l_{sa} - j_{sa}^{ik})}}{\binom{D + j_{sa} - n - l_{sa} - j_{sa}^{ik}}{(D + j_{sa} - n - l_{sa} - j_{sa}^{ik})}}$$

$$\sum_{k=1}^n \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n_{ik}+\mathbb{k}_1}^n \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n \wedge l = i^l \wedge l_{sa} \leq D - j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} - j_{sa}^{ik} + j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} - j_{sa}^{ik} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge$$

$$s \geq n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_{ik} j^{sa}}^{DOST} = & \left(\sum_{k=i}^n \sum_{l=i}^{(l_{ik} - i^{l+1})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\
& \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
& \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - i^l - j_{sa}^{ik} - 1)!}{(l_{ik} - i^l - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa} - l_{ik} - s)!}{(D + j_{sa} - l_{sa})! \cdot (n - l_{sa})! \cdot (n - s)!} \right) + \\
& \left(\sum_{k=i}^n \sum_{l=i}^{(l_{ik} - i^{l+1})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa} - i^{l+1}} \right. \\
& \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
& \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=i}^{\binom{()}{l}} \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-l_{k_1}+1}} \sum_{n_{sa}=n_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - s - \dots)!}{(n_i - n_{ik} - \dots)! \cdot (\dots - s)!} \cdot \frac{(D - l_i)!}{(D + s - \dots - l_i)! \cdot (n - \dots)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - 1 > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 > l_{ik} \wedge$$

$$s \in \{s_{sa}, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}^{ik}, j_{sa}^{ik}\} \wedge$$

$$s \geq \dots \wedge s = s + l_{k_2}$$

$$l_{k_2}: z = \dots \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=i}^{\binom{()}{l}} \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-i-l-j_{sa}^{ik}+1} \sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{ik}=n+l_{k_2}-j_{ik}+1}}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \right)$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \cdot$$

$$\left(\sum_{k=i^l}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = l_{sa} + n - D}^{l_{sa} + j_{sa}^{ik} - j_{sa} - 1} \right)$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_{ik} = n + \mathbb{k}_2 - j_{sa} - \mathbb{k}_2)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{sa} = n - j^{sa} + 1}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=i^l}^{(l_{ik} - i^l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = l_{sa} + n - D}^{l_{sa} - i^l + 1} \sum_{i^l - j_{sa}^{ik} + 2}^{i^l - j_{sa}^{ik} + 2}$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{sa} = n - j^{sa} + 1} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{sa} = n - j^{sa} + 1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n_{sa} + j_{sa}^{ik} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - l_i + j_{sa}^{ik} - j_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s - j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^s, \dots, \mathbb{k}_1\}$$

$$s \geq 5, \mathbb{k}_1 = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}^{ik}}^{DOST} = \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + \dots - s = \dots \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge \dots$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, l_a\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z \geq 2 \wedge k = k_1 \wedge k_2 \Rightarrow$

$$\sum_{k=1}^{DOST} \sum_{l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \sum_{i=0}^{(l_{sa} - i l - s + 1)} \sum_{j_{ik}=l_i + n + j_{sa}^{ik} - D - s}^{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^{\sum_{j=j_{sa}^{ik}}} \sum_{j=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-i^{s+1}} \sum_{n_i=n+\mathbb{k}}^{(n_i-j_{ik}+\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^{(l_{ik} - i^{ik} + 1)} \sum_{l_i+n-D}^{l_i+j_{sa}-1} \sum_{j_{sa}^{ik}+n+j_{sa}-D-s}^{j_{sa}^{ik}-1} \dots$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(n_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i^{ik} - j_{sa})!}{(l_{ik} - j_{ik} - i^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}^a=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_2+1)}^{(n_i-j_{ik}-\mathbb{k}_2+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-\mathbb{k}_2}^{n_{ik}+j_{ik}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik})!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=1}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}^a=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = \mathbb{k} \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^n \sum_{i=1}^n \sum_{j_{sa}=j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}_1, n_j=n+\mathbb{k}_2, n_{sa}=n-j_{sa}+\mathbb{k}_2} \frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l = \mathbb{k} \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^i \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = \mathbb{k} \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^i \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{k=1}^n \sum_{i=1}^{l_{sa}-k} \sum_{j_{sa}=j_{sa}^{ik}}^{l_{sa}-i+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=0}^{\infty} \sum_{l=0}^{(\cdot)} \sum_{j^{sa}=j_{sa}}^{j_{ik}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{(\cdot)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}}^{(\cdot)}$$

$$\frac{(n_i - s - k)!}{(n_i - n - k)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_i \leq D + l_{sa} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=i}^n \sum_{l=j_{sa}^{ik}}^{()} \sum_{j_{sa}=l_{sa}+n-1}^{l_{sa}-l+1} \dots$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_{ik}-k_1+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{(n_{ik}+j_{sa}-k_2)}^{(n_{ik}+j_{sa}-k_2)} \dots$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \dots$$

$$\frac{(j_{sa} - k_1 - 1)! \cdot (n_{ik} + j_{ik} - j_{sa})!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!} \dots$$

$$\frac{(l_{sa} - j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} - j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!} \dots$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n) \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n) \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa} - j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^{\mathbb{k}} \sum_{l=j_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-i-l-j_{sa}+1} \sum_{j_{sa}^{ik}-j_{sa}}^{j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}^{ik}-j_{sa}}^{j_{sa}^{ik}-j_{sa}} \sum_{n_i=n+\mathbb{k}_1}^n \sum_{j_{ik}+1}^{(n_i-j_{ik}-1)} \sum_{n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i-n_{ik}-\mathbb{k}_1)!}{(j_{ik}-j_{sa}-1)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \frac{(n_{sa}-n_{sa}-1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-i-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-i-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$((D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} + j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + l_{sa} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}}^{DOST}} = \sum_{k=i}^n \sum_{l=j_{sa}+j_{sa}^{ik}}^{n-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_{sa}-j_{ik}+1}^{n_i-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(l_{ik} - i l - j_{sa}^{ik} + 1)!}{(j_{ik} - j_{ik} - i l + 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} = j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa}^{ik} > l_{ik} - l_i + j_{sa} - j_{sa}^{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$D \geq n < n \wedge l = i \wedge l_s > 0 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{ik}, \dots, l_{k_1}, j_{sa}^{ik}, \dots, j_{sa}^{ik}, \dots, j_{sa}^{ik}\}$$

$$s \geq 5, l_{k_1} = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + 1 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{ik}}} = \sum_{k=i}^{l_i} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-i+1)} \sum_{j_{sa}^{ik}=l_{sa}+n-D}^{l_{sa}-i+1}$$

$$\sum_{n_i=n+l_{k_1}}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}$$

$$l_{sa} > D + l_s + j_{sa} - n - 1) \wedge$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} > D + l_{ik} + j_{sa} - j_{sa}^{ik}) \wedge$$

$$D \geq n < n \wedge l = k > l \wedge$$

$$j_{sa}^{ik} - 1 \wedge j_{sa} - j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$k_2 = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik} - 1)! \cdot (j^{sa} + j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!}$$

$$\left((D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s - l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} - l_{ik} \wedge$$

$$l_{sa} > D + l_s - j_{sa} - n - 1) \vee$$

$$(D < n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{ik} + 1 > l_s \wedge$$

$$l_{sa} > D + j_{ik} + j_{sa} - n - j_{sa}^{ik}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{ik}-i+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-i+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - n_{sa} - 1)! \cdot (n_{sa} - j^{sa})!}$$

$$\frac{(l_{sa} - j_{sa}^{ik} - l_{sa} - j_{sa})!}{(j_{ik} - l_{sa} - j^{sa} - 1)! \cdot (j^{sa} - j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l = i \wedge l_s = D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa} - j_{sa}^{ik} - l_{ik} \wedge$

$l_{sa} > (l_{sa} + l_s + j_{sa} - n - 1) \vee$

$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{sa} - j_{sa}^{ik} + 1 > l_s \wedge$

$l_{sa} > D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + l \wedge$$

$$l_z: z = 2 \wedge l = l_1 + l_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^n \sum_{l=1}^{(l_{ik}-i+1)} \sum_{j_{sa}=l_{sa}+n-l}^{l_{sa}-i+1} \sum_{n_i=n+l}^n \sum_{(n_{ik}=n+l_2-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{j_{sa}=n-l_2}^{n_{ik}+j_{sa}-l_{k_2}} \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \frac{(n_{ik} - j_{sa} - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa})!} \cdot \frac{(n_{sa} - j_{sa} - n - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i - l - j_{sa}^{ik})!}{(l_{ik} - i - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\begin{aligned} & ((D + n < n \wedge l_s > n - n + 1) \wedge \\ & j_{sa}^{ik} + 1 \leq j_{sa} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee \\ & (j_{sa} > n - l_s \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \\ & j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee \end{aligned}$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$DOST_{j_{sa}} = 0$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_{ik}, j^{sa}}^{DOST} = & \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left(\sum_{k=l}^{(j^{sa}+j_{sa}-j_{sa}^{lk}-1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{(j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} + j_{sa} - n - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa} - 1)!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - j_{sa}^{ik} - 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - j_{sa}^i + 1 \wedge j_{sa}^i = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{()}{l_{ik} + j_{sa}^{ik} - j_{sa}^{ik} + 1}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(l_i + n + j_{sa}^{ik} - D - s)} \sum_{(n_i - j_s)} \sum_{(n_i + k)} \sum_{(n_i + k + j_{sa}^{ik} - j_{ik})} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - k_1)} \sum_{(n_{ik} = n_{ik} + j_{ik} - j^{sa} - k_2)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge n > D - l + 1 \wedge \\ & 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee \\ & n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \end{aligned}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \Big) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} j_{sa}=j_{ik}+j_{sa}^{ik} \right. \\ \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D} \\ \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{ik}-l)} \cdot \\
 & \sum_{n_i=n}^n \sum_{(n_{ik}=n+l_{ik}+j_{ik}+1)}^{(n_i-j_{sa}-l_{ik}-j_{sa}-l_{k_2})} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j_{sa}-l_{k_2})} \cdot \\
 & \frac{(n_i - l_{k_2} - 1)!}{(j_{ik} - l_{k_2} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-l+1)} \cdot \\
 & \sum_{n_i=n+l_{k_2}}^n \sum_{(n_{is}=n+l_{k_2}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDENWA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > 0 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{lk} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 5 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_2 : z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left(\sum_{k=l}^n \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})}} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa} = l_{sa}+n-D \right) \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_s + n - D}^{l_s + j_{sa} - l} \right) \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_1 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_s - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}^{l_s - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \binom{l_s + j_{sa}^{ik} - l}{j_{ik} = l_s + n + j_{sa}^{ik} - j_{sa} - 1} j^{sa} = l_s + n - j_{sa} - 1 \\
 & \sum_{n_i = n + l_{ik} - n_{ik} - j_{sa} - l_{k_2}}^n \binom{n - j_{ik} - n_{ik} - j_{sa} - l_{k_2}}{n_{ik} = n + l_{k_2} - j_{ik} - 1} n_{sa} = n - j^{sa} + 1 \\
 & \frac{(n_i - j_{ik} - n_{ik} - j_{sa} - l_{k_2} - 1)!}{(j_{ik} - n_{ik} - j_{sa} - l_{k_2} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l} \binom{()}{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{j^{sa} = l_s + n + j_{sa} - D - s}^{l_s + j_{sa} - l} \\
 & \sum_{n_i = n + l_{k_2}}^n \binom{(n_i - j_s + 1)}{n_{is} = n + l_{k_2} + j_{sa}^{ik} - j_{ik}}
 \end{aligned}$$

GÜLDÜZMAYA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}\} \wedge$

$s \geq 5 \wedge s = s + 1 \wedge$

$\mathbb{k}: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + 1 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{(l_s + j_{sa}^{lk} - l)}{j_{ik}=l_s + n + j_{sa}^{ik} - D - 1}} \sum_{\binom{l_{sa} - l + 1}{j_{sa}=l_{sa} + n - D}} \sum_{n_{ik}=n+\mathbb{k}}^n \sum_{\binom{(n_i - j_{ik} - \mathbb{k}_1 + 1)}{n_{ik}=n+\mathbb{k}_2 - j_{ik} + 1}} \sum_{\binom{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}{n_{sa}=n - j^{sa} + 1}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D, \dots, j_{ik} = j_{ik} + \dots - j_{sa}^{ik})} \sum_{(n_i - j_s)} \sum_{(n_i + \mathbb{k} (n_{is} + \mathbb{k} + j_{sa}^{ik} - j_{ik}))} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1, \dots, n_{ik} = j_{ik} - j^{sa} - \mathbb{k}_2)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$2 \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{sa} \leq j^{sa} + j_{sa} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} + j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_s = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$s \geq n - l_i \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \left. \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(n + j_{sa} - j^{sa} - s)!} \right) + \\ \left(\sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \left. \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right)$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} - l + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k + j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_s = n + k + j_{sa} - j_{sa}^{ik} - k_2)}^{n_{ik} + j_{sa} - j_{sa}^{ik} - k_2}$$

$$\frac{(n_i - j_{ik} - 1)!}{(n_i - n - k - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - j_{sa} - k_2 - 1)!}{(n_{ik} + j_{sa} - n_{sa} - j_{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \Big) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{l_{sa} - l + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot$$

GÜLDÜZMAYA

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^s j_{sa}^{sa} = \sum_{k=l}^n \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k+j_{sa}^{lk}-j_{sa}}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{lk}-j_{sa}^{lk}-l_{k1}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}^{lk}-l_{k2}}}^{(n_i-j_s+1)}$$

$$\frac{(l_s - l_{k1} - 1)!}{(n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l_{k2} - 1)!}{(l_s + j_{sa}^{lk} - j_{sa}^{lk} - l)! \cdot (j_{sa}^{lk} - j_{sa}^{lk} - 1)!} \cdot \frac{(D - s)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{lk} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} \leq n - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = l_{k1} = 0 \wedge$$

$$j_{sa}^{lk} \leq j_{sa}^{lk} - 1, j_{ik} < j_{sa}^{lk} - 1 \wedge j_{sa}^{lk} = j_{sa}^{lk} - 1 \wedge$$

$$s: (j_{sa}^{lk_1}, j_{sa}^{lk_2}, \dots, j_{sa}^{lk_z}, \dots, j_{sa}^{lk_z})$$

$$z \geq 5 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z \geq 2 \wedge l_{k_z} = l_{k_z} \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}} \sum_{l_s-l+1}^{l_s-l+1} j^{sa=l_{ik}+n+j_{sa}-D-j_{sa}^{lk}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{ik}=n+l_{k2}-j_{ik}+1}}^{(n_i-j_{ik}-l_{k1}+1)} \sum_{n_{sa}=n-j_{sa}^{lk_2}}^{n_{ik}+j_{ik}-j_{sa}^{lk_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}^{sa}=l_i+n+j_{sa}-D)}$$

$$\sum_{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n \wedge n \wedge l_s > D - 1 + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} < j^{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D > n \wedge n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!}$$

$$\frac{(n_{sa} - j^{sa} - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{sa}^{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{l=l}^{(s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa})} \sum_{(j_{ik} = l_i + n - l - j_{sa}^{ik})} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n - k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_2 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{lk} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} -$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \dots + \mathbb{k}_2 \Rightarrow$

$$f_{z, S, D, T}^{j_{sa}} = \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \frac{(j^{sa}+j_{sa}^{ik}-j_{sa})}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{l_s+j_{sa}-l}{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!} \cdot \frac{(n_i - j_{ik} - \mathbb{k}_1 + 1)}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}{(n_{sa} - 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D)}^{l_i + j_{sa} - l - s + 1} \sum_{(j_{sa} = l_s + j_{sa}^{ik} - l + 1)} \\
 & \sum_{n_i = n + k_1}^n \sum_{(n_i - j_{ik} = k_1)}^{(n_i - j_{ik} - 1)} \sum_{(n_{sa} = n - j_{sa}^{ik} + 1)}^{n_{ik} + j_{ik} - k_2} \\
 & \frac{(n_i - n_{ik})!}{(n_i - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_{sa} + n - D} \\
 & \sum_{n_i = n + k_1}^n \sum_{(n_i = n + k_1 + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{j_{sa}^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{l_i + j_{sa} - l - s + 1} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa}^{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{(l_{ik} - l + 1)} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_2: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + 1 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{l_{sa}}{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{sa}-l} \dots$$

$(D \geq n < n) \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge$

$(l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$

$(D \geq n < n) \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$(l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n) \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} - 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(n_i - j_s + 1)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(n_i - \mathbb{k}_1 + 1)} \sum_{(n_i = n + \mathbb{k})}^{(n_i - n_{ik} - 1)} \sum_{(n_{sa} = n - j_{sa} + 1)}^{(n_{sa} - \mathbb{k}_2 - 1)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - j_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(n_i - j_s + 1)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(n_i - j_s + 1)} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1, j_{sa}^s = j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^l\} \wedge$

$s = 5 \wedge s = \dots + \mathbb{k} \wedge$

$\mathbb{k}_z: \dots = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^n \sum_{(n_{ik}-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{l_{sa}}{j_{sa}^{sa} - l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_{sa} - l} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n + 1 \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n + 1 \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n + 1 \wedge l_s > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+\mathbb{k}_2)}^{(n_{ik}+j_{ik}+j_{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j_{ik} - l - 1)! \cdot (n_{sa} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

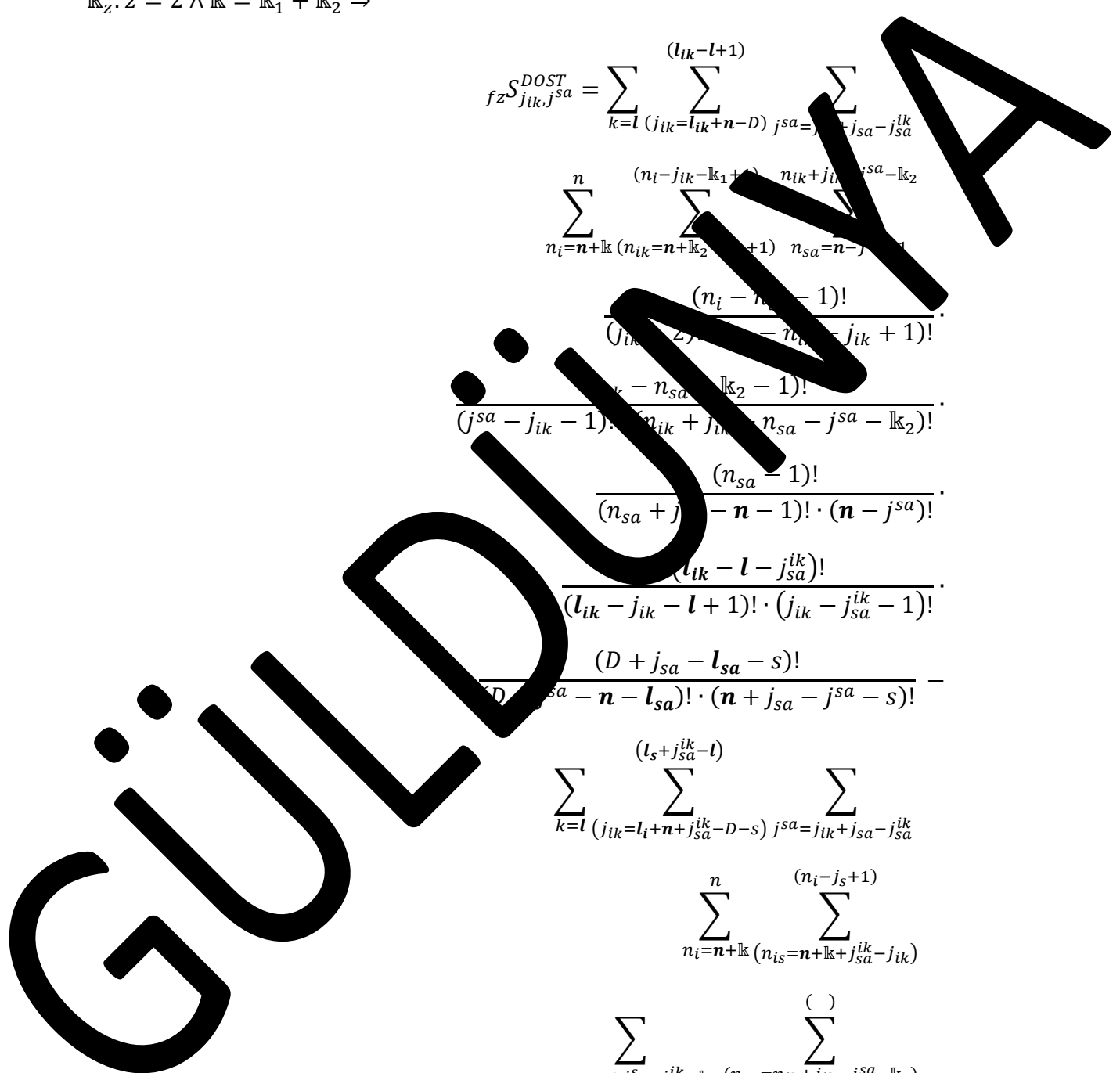
$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{D-s} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n+l_k-j_{sa}+1)}^{n_{ik}+j_{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j_{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

GÜLDENWA

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z \geq 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} \sum_{k=l}^{DOST} \sum_{j_{ik} j_{sa}} &= \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s} \\ &\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\ &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-l_{sa})}^{(l_i+l-s+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \\
 & \sum_{n_i=n+l_{sa}}^n \sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}+j_{ik}-l_{sa})}^{(n_{ik}+j_{ik}-l_{sa})} \sum_{(n_{sa}=n-j^{sa}+1)} \\
 & \frac{(n_i - n_{ik} - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}{(j_{sa}^{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \\
 & \sum_{n_i=n+l_{sa}}^n \sum_{(n_{is}=n+l_{sa}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{sa}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{sa})}^{()}
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_{z^S} S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \\
&\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2} \\
&\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i+l_k-j_{ik})}^{(n_i+l_k+1)}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{ik}-l_{k_2})}^{()} \sum_{(j^{sa}-l_{k_2})}^{()} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $((D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s -$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{POST}^{sa} = \sum_{k=l}^{n+n+j_{sa}^{ik}-j_{sa}-1} \sum_{(j_{ik}+k+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n-j_{sa}^{ik})}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \\
& \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^n \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_i-j_s+1)} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fzS_{k,j_{sa}}^{DOS} = \sum_{k=l}^n \sum_{j_{sa}^{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{j_{sa} - l} j^{sa} = l_s + n + j_{sa} - D - 1$$

$$\sum_{n_i = n + k}^n \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} - k_1 + 1} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^n \sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{()} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{n_{is} = n + k + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)}$$

GÜLDÜNKYA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} -$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \dots + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} \sum_{k=l}^{OST} \sum_{j_{ik}, j^{sa}} &= \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \end{aligned}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n - j_{ik})}^{(n_i - \mathbb{k} + 1)} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1)}^{(n_{ik} - j_{sa} - \mathbb{k}_2)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j^{sa} + n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s = D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - j_{sa}^{ik} \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{i_1}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$j_{sa}^{i_1} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_i + j_{sa} - l - s + 1}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{sa}=n-j^{sa}+1 \\ (n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_s - l - j_{sa} - s)!}{(l_s + j_{sa} - n - 1)! \cdot (n - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{()}{l}} \sum_{\substack{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa} \\ (j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{\substack{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik} \\ (j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}} \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{\binom{()}{n}} \sum_{\substack{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$l_s \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \dots$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_i - j_{ik} - l - s + 1)}^{(n_i - j_{ik} - l - s + 1)} \sum_{(n_{ik} = j_{ik} - n_{sa} - j_{sa}^{ik} - \mathbb{k}_2)}^{(n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}{(j_{sa}^{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

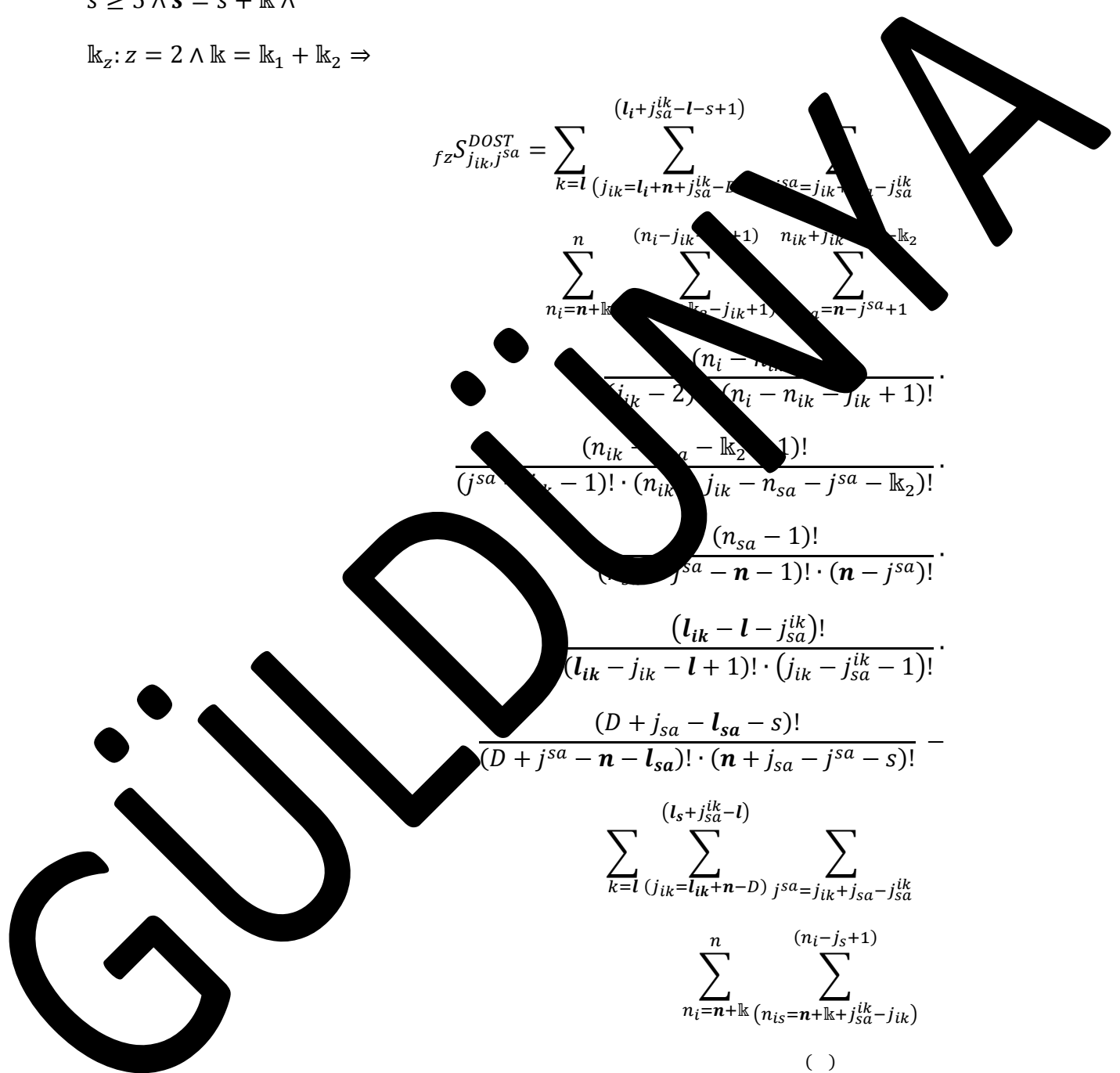
$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - I)!}{(n_i - n - I)! \cdot (n - s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z \geq 2 \wedge k = k_1 \vee k_2 \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_s + j_{sa} - l} j^{sa} = l_{sa} + n - D$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(j_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=l_s + n + j_{sa}^{ik} - D}^{n - j_{ik} - l + 1} \sum_{j_{sa}=l_s + j_{sa}^{ik} - l + 1}^{n - j_{sa} - l + 1} \\
 & \sum_{n_i=n+k}^n \sum_{n_{ik}=n - j_{ik} + 1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa}=n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \\
 & \frac{(n_i - n_{ik})!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa}=l_i + n + j_{sa} - D - s} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik}=n_{is} + j_{sa}^{ik} - j_{sa} - k_1}^{()} \sum_{(n_{sa}=n_{ik} + j_{ik} - j_{sa} - k_2)}
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1, j_{sa}^s = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s = 5 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: \dots = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 & \sum_{n_i = n + \mathbb{k}_2}^n \sum_{n_{ik} = n + \mathbb{k}_2 + j_{ik} + 1}^{j_{ik} - j_{sa} - \mathbb{k}_2 + 1} \sum_{n_{sa} = n - j^{sa} + 1}^{j_{ik} - j_{sa} - \mathbb{k}_2 - 1} \\
 & \frac{(n_i - j_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - j_{sa} - \mathbb{k}_2 - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(j_{sa} - j_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{sa} - \mathbb{k}_2 - 1)! \cdot (j_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 & \sum_{n_i = n + \mathbb{k}_2}^n \sum_{n_{is} = n + \mathbb{k}_2 + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)}
 \end{aligned}$$

GÜLDENWA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_1 + z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z^{\mathcal{S}^{DOST}}_{j_{ik}, j^{sa}} = \sum_{k=l}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_s+j_{sa}-l} \sum_{j^{sa}=j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik} = j_{sa}^{ik} - l + 1}^{j_{sa}^{ik} - l + 1} \sum_{j_{sa} = l_s + j_{sa}^{ik} - l + 1}^{j_{sa}^{ik} - l + 1} \\
 & \sum_{n_i = n + k}^n \sum_{n_{ik} = j_{ik} + 1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \\
 & \frac{(n_i - n_{ik})!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{()} \sum_{j_{sa} = j_{sa} + 1}^{l_s + j_{sa} - l} \\
 & \sum_{n_i = n + k}^n \sum_{n_{is} = n + k + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{()} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}^{()}
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 =$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{sa}=j_{sa}+1)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\begin{aligned}
 & \left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{sa} + 2} \right. \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

GÜLDENWA

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n=n+\mathbb{k}}^n \sum_{(n_{is}=n-\mathbb{k})}^{(n_i-1+1)} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1)}^{(n_{ik}=j_{sa}-\mathbb{k}_2)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(n - l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$
- $j_{ik}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + \dots \leq j_{sa} \leq j_{sa} + j_{sa}^{ik} - s \wedge$
- $l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $l_{sa} \leq D + j_{sa} - n \wedge$
- $D > n \wedge I = \mathbb{k} > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$
- $s \in \{j_{sa} - 1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$
- $s \geq 5 \wedge s = s + \mathbb{k} \wedge$
- $\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_{ik} j^{sa}}^{DOST} = & \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left. \frac{(D + j^{sa} - n - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_s+j_{sa}^{ik}-j_{sa}-1} \sum_{j^{sa}=j_{sa}+2}^{l_s+j_{sa}-l} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
 \end{aligned}$$

GÜLDEN

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - k_1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-1)}$$

$$\sum_{n+l}^{(n_i-l-k_1+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-l-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

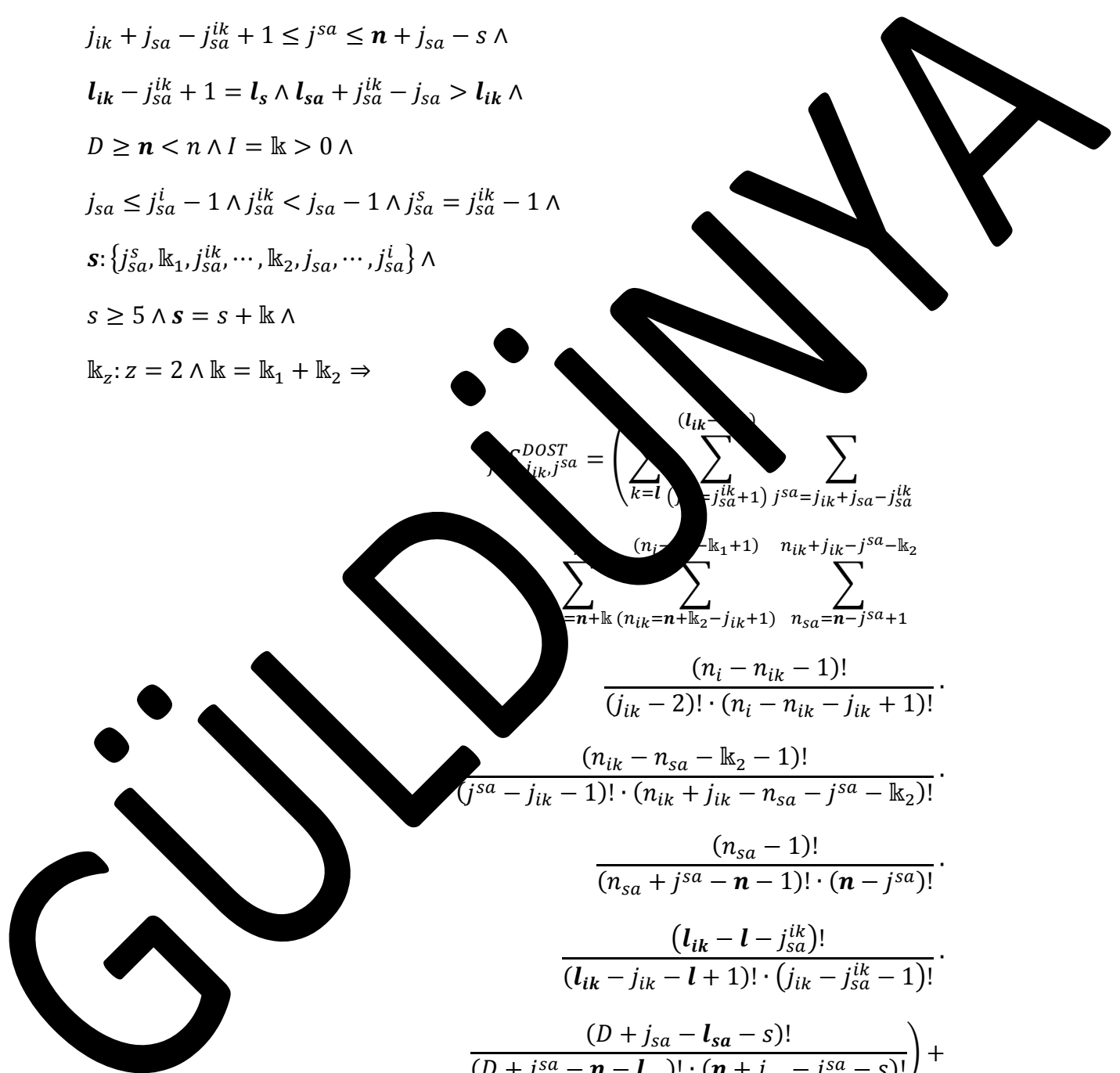
$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \right)$$



$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_i - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \left(\frac{(D - j_{sa} - l_{sa} - s)!}{(n + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l-1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(n_i - s - I)!}{(n_i - n - I)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOST} = \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{l_{sa} - l + 1} \frac{\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) + \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) \cdot \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{l_{sa} - l + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \right)$$

$$\begin{aligned}
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - j_{sa}^{ik})!}{(D + j^{sa} - n - j_{sa}^{ik} - l_{sa} - j_{sa}^{ik} - s)!} \cdot \\
& \sum_{k=0}^{j_{sa}^{ik}-l} \sum_{l_{ik}=j_{sa}^{ik}+1}^{n} \sum_{a=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1}^{n} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$n \geq n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} - j_{sa} + j_{ik} - j_{sa}^{ik} - l + 1)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} - l + 1)}$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}^{(n_i - j_{ik} + 1)} \sum_{(n_{sa} = n - j_{sa} + 1)}^{(n_{ik} + j_{ik} - \mathbb{k}_2)}$$

$$\frac{(n_i - j_{ik} - \mathbb{k}_1 - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}{(j_{sa}^{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

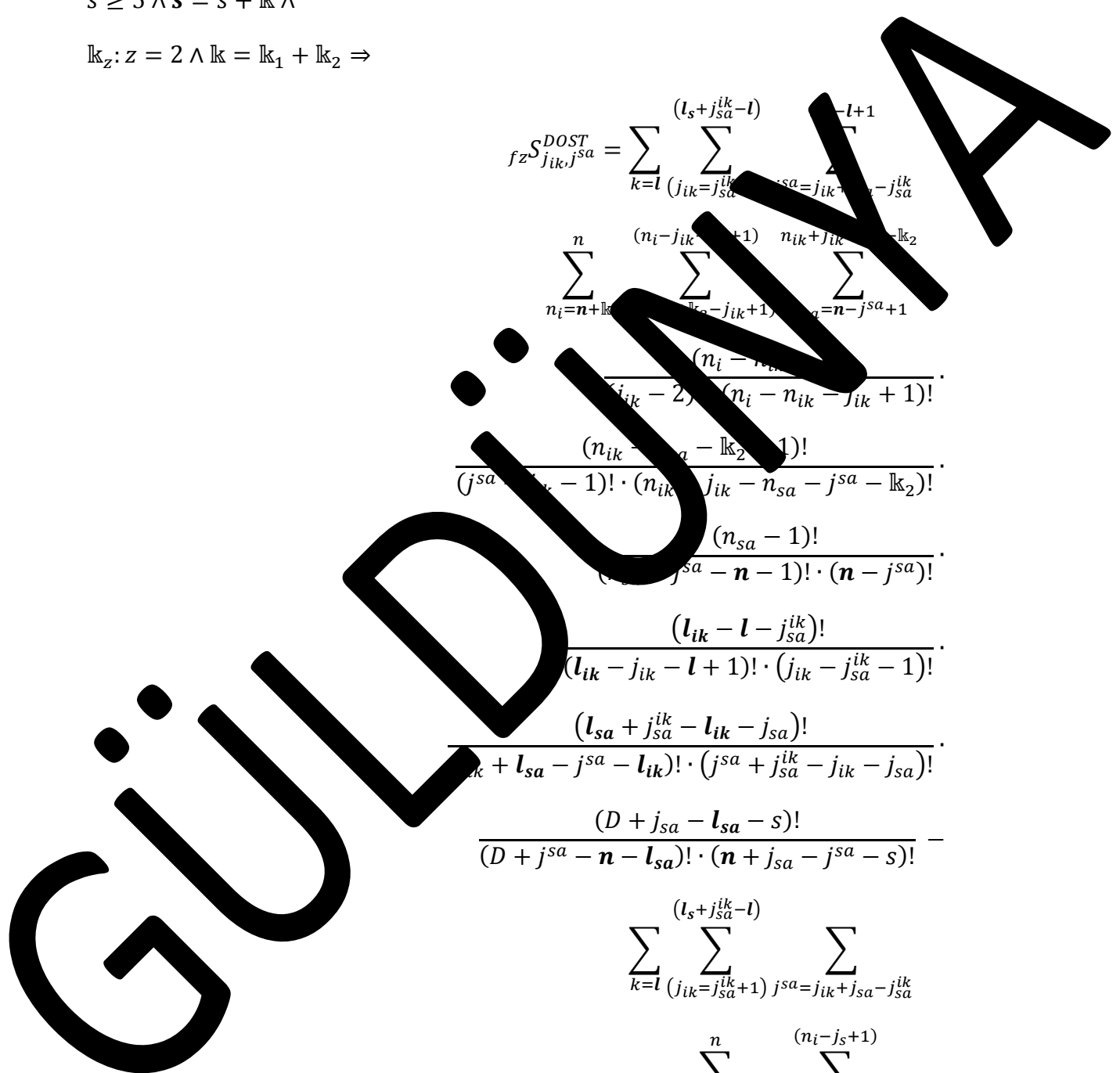
$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{is} = n + \mathbb{k}_1 + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()}$$



$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{ik, j^{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \right)$$

$$\begin{aligned}
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik}} \sum_{j^{sa} = l_{sa} + n - D}^{n_{ik} + j_{sa} - j^{sa} - l_{sa} - 1} \right. \\
& \sum_{n_i = n + l_{sa}}^n \sum_{(n_{ik} = n + l_{sa} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{sa} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{sa} - j^{sa} - l_{sa} - 1} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{sa} - 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}^{n_{ik} + j_{sa} - j^{sa} - l_{sa} - 1} \\
& \sum_{n_i = n + l_{sa}}^n \sum_{(n_{ik} = n + l_{sa} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{sa} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{sa} - j^{sa} - l_{sa} - 1} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{sa} - 1)!} \cdot
\end{aligned}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(l_{ik}=l+n+j_{sa}-D-1)}^{()} \sum_{(j_s+1)}^{()} n_{i_s}^{(k)} (n_{i_s}=n+k+j_{sa}^{ik}-j_{ik}) \sum_{(n_{i_s}=n_{i_s}+j_{sa}^s-j_{sa}^{i_s})}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$D + l_{sa} + j_{sa} - j_{sa}^{ik} + 2 \leq l \leq i - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} - j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik})}^{(n_i-j_{ik}-k_1+1)} \sum_{(n_{sa}=n+k_1-j_{sa}+1)}^{(n_{ik}-j_{sa}-k_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - j_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - k_2)!}$$

$$\frac{(n_{sa} - j_{sa} - n - 1)!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(n_{sa} - l - j_{sa}^{ik})!}{(n_{sa} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

GÜLDENYA

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{\binom{()}{j_{ik}, j_{sa}}} \sum_{\substack{l_s + j_{sa} - l \\ j^{sa} = l_{sa} + n - D}} \sum_{\substack{n \\ n_i = n + k}} \sum_{\substack{(n_i - j_{ik} - k_1 + 1) \\ n_{ik} = n + k_2 - j_{ik} + 1}} \sum_{\substack{n_{ik} + j_{ik} - j^{sa} - k_2 \\ n_{sa} = n - j^{sa} + 1}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right)$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + j_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{\binom{()}{l_s - l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(n_i+n+l_{sa}-D-s)} \sum_{(n_i-j_s)} \sum_{(n_i+l_k+n+l_{sa}+j_{sa}^{ik}-j_{ik})} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1})} \sum_{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l = l \wedge l_s \leq D - n - 2 \wedge$
- $D + l_{sa} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq l - 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 = j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $j_{sa}^{ik} - j_{sa} < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$
- $D \geq n < n \wedge l = l > 0 \wedge$
- $j_{sa} \leq j^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

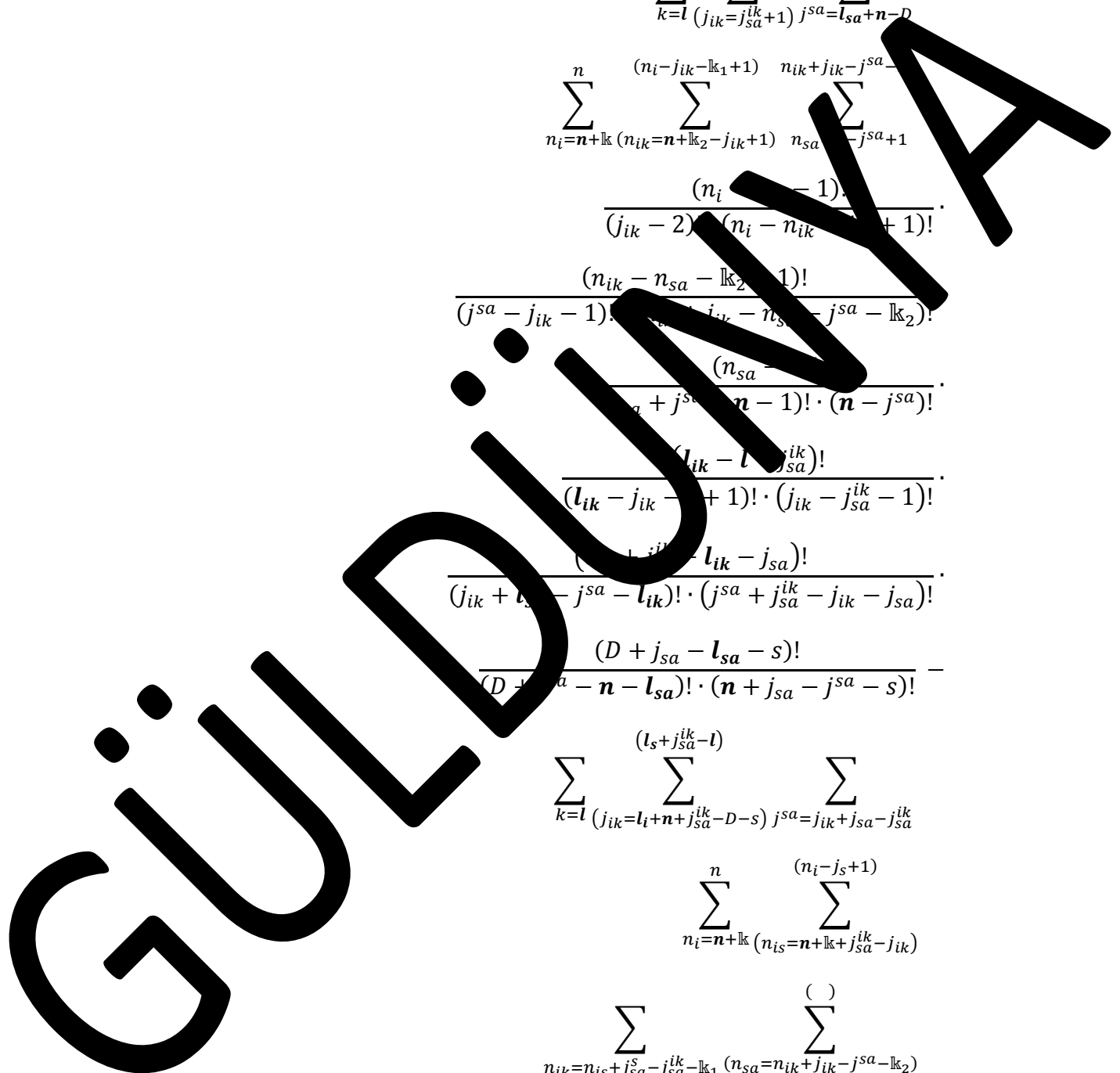
$$\frac{(n_i - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(j_{ik} + l_{sa} - j^{sa} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - \mathbb{k}_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{l_i=l}^{(l_{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
& \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n; n+l_k}^n \sum_{(n_{is}=n+l_k-j_{ik})}^{(n_{is}+1)} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{ik}-l_1)}^{(n_{ik})} \sum_{(j_{sa}=n_{ik}-j_{sa}-l_{k_2})}^{(n_{ik})} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_{sa} - l - 1)!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $D \geq n < n \wedge l = 1 \wedge l_s \leq D - n - 1 \wedge$
- $2 \leq l \leq D - l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_s \leq j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$
- $D \geq n < n \wedge l = l_k > 0 \wedge$
- $j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$
- $s \geq 5 \wedge s = s + l_k \wedge$
- $l_{k_z}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$

$$\begin{aligned}
f_z S_{j_{ik}, j^{sa}}^{DOST} = & \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \right. \\
& \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left(\sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{sa} - l + 1} \right. \\
& \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
& \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n+l_{k_2}-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!}$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa}^{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-1)}$$

$$\sum_{n+l}^{(n_i-l-k_1+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-l-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-s-l)!}{(n_i-n-l)!(n-s)!}$$

$$\frac{(l_s-l-1)!}{(l_s+j_{sa}^{ik}-j_{ik}-l)!(l_s-l-1)!}$$

$$\frac{(D-l_i)}{(D+j_{sa}+s-n-l-j_{sa})!(n-l-j_{sa}-j_{sa}-s)}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq l_s + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i_s} - 1 \wedge j_{sa}^{i_s} - j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{i_s} - 1 \wedge$$

$$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{i_s}, \mathbb{k}_2, j_{sa}^{i_s}, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = 1, 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{DOST}}} = \sum_{k=l}^{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik})} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{(n_{is} + \mathbb{k} (n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik}))} \sum_{(j_s = j_s + 1)}$$

$$\sum_{(n_{is} + j_{sa}^s - j_{sa}^{ik} = s_1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

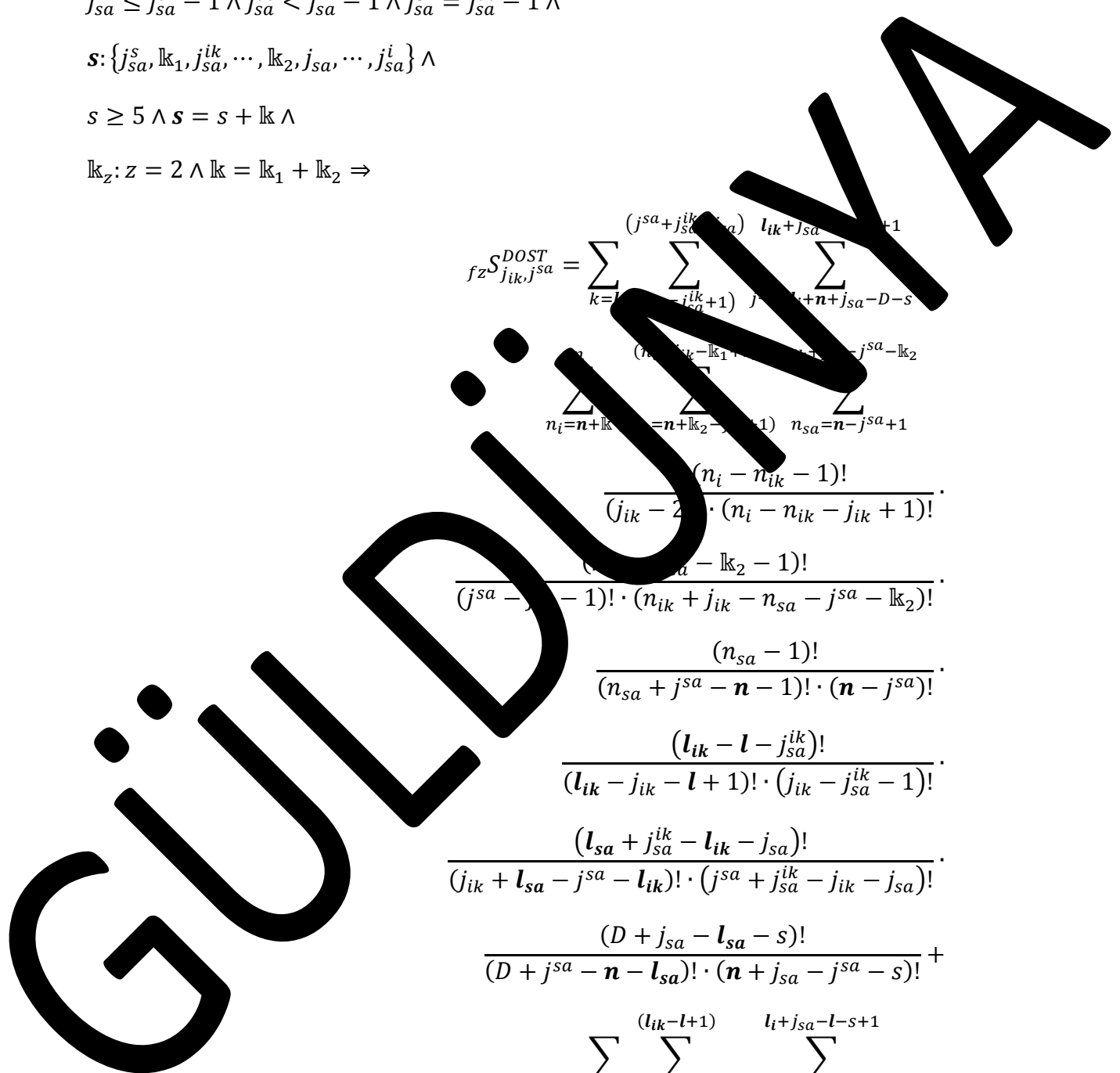
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - l_{sa})} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik} + j_{sa} - l - s + 1} \sum_{n_i = n + k}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{sa} - k_2 - 1)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{n_i - j_{ik} - k_1 + 1} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$



$$\begin{aligned}
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_{ik}=j_{sa}^{ik}-j_{sa})}^{(\cdot)} \sum_{l_{ik}+j_{sa}^{ik}+1}^{(\cdot)} \sum_{n_i=n+l_{sa}-D-s}^{(\cdot)} \\
& \sum_{n_i=n+l_{sa}}^n \sum_{(n_{is}=n+l_{sa}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\cdot)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$(D > n) \wedge n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOS} = \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{(l_i+n+j_{sa}-D-s-1)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)} \sum_{(j_{sa}^{ik}-l-s+1)} \sum_{(j_{ik}-k_1+1)} \sum_{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{(n_{sa}=n-j_{sa}+1)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

GÜLDÜZMÜNYA

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa}^{ik} - l_{k_2})!} \cdot \\
 & \frac{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik} - 1)!}{(n_i - n_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})}^{(\quad)} \\
 & \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!}
 \end{aligned}$$

GÜLDEN

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} - j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{(n_i - j_{sa}^{ik} + 1)} \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{sa} - j_{sa}^{ik} + 1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_i + j_{sa} - l - s + 1} j^{sa} = l_s + j_{sa} - l + 1 \\
 & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 & \sum_{k=l}^{()} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_s + j_{sa} - l} j^{sa} = l_i + n + j_{sa} - D - s \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)} \\
 & \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDEN

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{sa}^{ik}}^{DOST} = \sum_{k=l}^{n+j_{sa}^{ik}-D-s+1} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}^{ik}-s+1} \sum_{j=l_i+n+j_{sa}-D-s}^{n_{sa}=n-j_{sa}^{ik}+1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

GÜLDENWA

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} = \sum_{k=l}^{\binom{l_{ik}+j_{sa}-j_{sa}^{ik}+1}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}=j_{sa}+1}^{\binom{l_{ik}+j_{sa}-j_{sa}^{ik}+1}{j_{sa}^{ik}+1}} \sum_{n_i=n+k}^{\binom{n_i-j_{sa}-k_1+1}{n_{ik}=n+k_2-j_{ik}+1}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{n_{ik}+j_{ik}-j_{sa}-k_2}{n_{sa}=n-j_{sa}+1}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{\binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}=j_{sa}+1}^{\binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}^{ik}+1}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i - j_{sa} - s > 0 \wedge$

$D + s - n < l_i \leq D + l_{sa} - s - n - j_{sa} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s = \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}, j_{sa}^i\} \wedge$

$s \geq 1 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}, j_{sa}^{ik}=l_i+n+j_{sa}-D-k+1)}$$

$$\sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\sum_{(n_{is}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik})}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}}$$

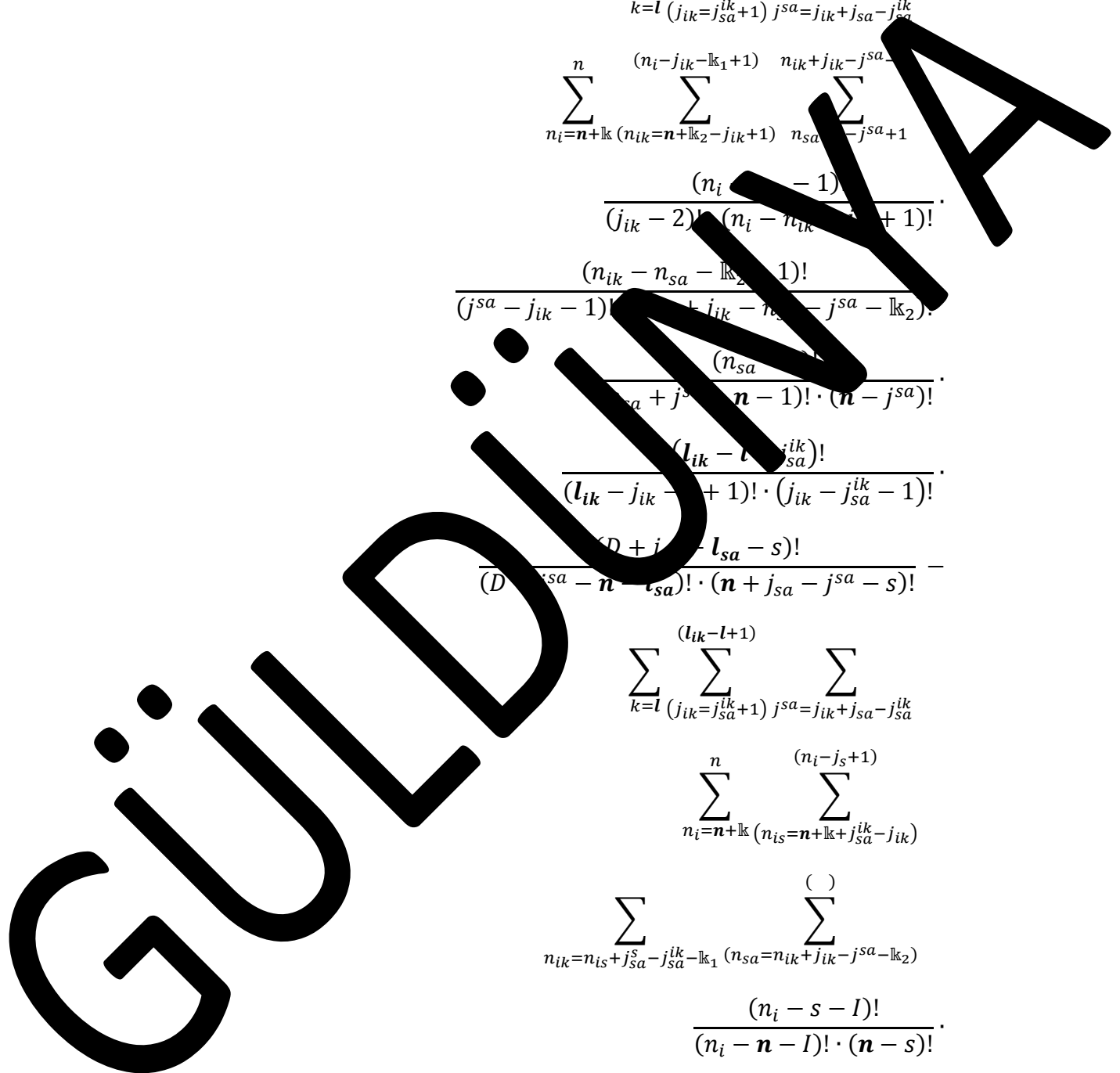
$$\frac{(n_i - 1)!}{(j_{ik} - 2)! (n_i - n_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! (j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$



$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(n_i-j_{sa}^{ik}-k_1+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(n_{ik}=n+k_2-j_{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

GÜLDÜNYA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l_s - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i - j_{sa} - s > 0 \wedge$

$D + s - n < l_i \leq D + l_s - s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}, j_{sa}^i\} \wedge$

$s \geq 1 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z^{S_{j_{ik}, j_{sa}^{ik}}} = \sum_{k=l}^{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-l_{sa})} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{(j_{sa}^{ik}=j_{sa}-j_s+1)}$$

$$\sum_{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{(n_{is}=n+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{l_i = j_{sa}^{ik} + 1}^{(j_{sa}^{ik} - j_{sa}) l_{ik} + j_{sa}^{ik} + 1} \sum_{(n_{ik} = \mathbb{k}_1 + 1) \dots} \sum_{j_{sa} = j_{sa} + 1} \dots$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2} \dots$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n_{sa} + j_{sa}^{ik} - j^{sa} - s)!} \cdot \sum_{k=l}^{n_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{j_{sa}^{ik} = j_{sa} + 1}^{n_{ik} + j_{sa} - j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()}$$

$$(D \geq n - n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}+1}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}_2)} \frac{(l_s-l+1)!}{(l_s+j_{sa}-j_{sa}^{ik}-l+1)! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \frac{(D-n-l)! \cdot (D-s)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1)$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n - l_i \leq D + l_s + s - n - 1)$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n - l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$l_{sa} \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} l_{ik+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_{sa}+n-D} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} n_{ik+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j^{sa}+1} \\
 &\frac{(n_i - n_{ik} - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 &\frac{(l_{sa} + j_{sa}^{ik})! \cdot (l_{ik} - j_{sa})!}{(l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} n_{ik+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j^{sa}+1} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{ik})}^{(n_i+l_k+1)}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1}-n_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_{sa} \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j_{sa}^s=j_{sa}+n-D}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} - j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j_{sa}^s=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq l_i < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{\substack{l_{ik} = j_{sa}^{ik} + 1 \\ (n_{ik} = \mathbb{k}_1 + \dots + \mathbb{k}_2 + 1)}}^{(j_{sa} + \mathbb{k} - j_{sa}) l_{ik} + j_{sa} - \mathbb{k} + 1} \sum_{\substack{j_{sa} = j_{sa} + 1 \\ (n_{sa} = \mathbb{k}_1 + \dots + \mathbb{k}_2 + 1)}}^{(n_{ik} - \mathbb{k}_1 - \dots - \mathbb{k}_2 - j_{sa} - \mathbb{k}_2)} \sum_{\substack{n_i = n + \mathbb{k} \\ (n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}}^{(n_{sa} = n - j_{sa} + 1)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - \mathbb{k}_2 - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=0}^{n - n_i + \mathbb{k}} \sum_{l_{ik}=j^{sa}+j_{ik}}^{n - n_i + \mathbb{k} + j_{sa}} \sum_{j_{sa}^{ik}=j_{sa}+1}^{n - n_i + \mathbb{k} + j_{sa} - l} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_i-s-l)} \cdot \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n - l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik})} \sum_{(j_{sa}^{sa+1})} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=n-j_{sa}^{sa})}^{(n_{sa}=n-j_{sa}^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j_{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j_{sa}^{sa+2})}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}^{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}+1} \sum_{(j_{sa}+j_{sa}^{ik}-j_{sa}^{ik}+2)}^{l_{sa}+1}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_{ik}-l+1)}^{(n_i-j_{ik}-l+1)} \sum_{(n_{ik}+j_{ik}-l_{k_2})}^{n_{ik}+j_{ik}-l_{k_2}} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{sa}=n-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - j_{ik} - l + 1)!}{(j_{ik} - l + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - l_{k_2} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(j^{sa}=j_{sa}+1)}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$f_z S_{j_{sa}^{ik}}^{D_0} = \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Bigg) +$$

$$\begin{aligned}
 & \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - n_{sa} - s)!}{(D + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \\
 & \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$\left((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} \sum_{z \in \text{DOST}} j_{ik} j_{sa}^{ik} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n=n+l_k}^n \sum_{(n_{is} = n - j_{ik})}^{(n_i - l + 1)}$$

$$\sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - l_{k_1} - \dots - l_{k_2})} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n - 1 \wedge$$

$$2 \leq l \leq D - j_{sa} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_s \leq j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D - j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_{ik}, j^{sa}}^{DOST} = & \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
 & \left. \frac{(D + l_{sa} - l_{ik} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{lk}+1)}^{(j^{sa}+j_{sa}-j_{sa}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

GÜLDEN

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_k+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_k - 1)!} \cdot$$

$$\frac{(n_{sa} + j_{sa} - n - 1)!}{(j^{sa} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik})! \cdot (l_{ik} - j_{sa})!}{(j_{ik} - j_{sa}^{ik} - 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} j^{sa}=l_i+n+j_{sa}-D-s$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_k}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_k)}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
& \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = i + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n=n+l}^n \sum_{(n_{is} = n - l + k)} j_{ik}$$

$$\sum_{(n_{ij} = n_{is} + j_{sa}^{ik} - k_1)} j_{sa} = i + j_{sa} - k_2$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(n_i - l - 1)!}{(j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$j_{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq n + j_{sa}^{ik} - 1 \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n - l_{ik} \leq D - l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D > n - n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^{ik_1}, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik} j_{sa}}^{DOST} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa}^{ik} - l_{k_2})!} \cdot \\
 &\frac{(n_i - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik})!} \cdot \\
 &\frac{(l_{ik} - j_{sa}^{ik})!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - j_{sa} - l_{sa} - s)!}{(D - j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \cdot \\
 &\sum_{k=l}^{(l_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})}^{(\quad)} \\
 &\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_j)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

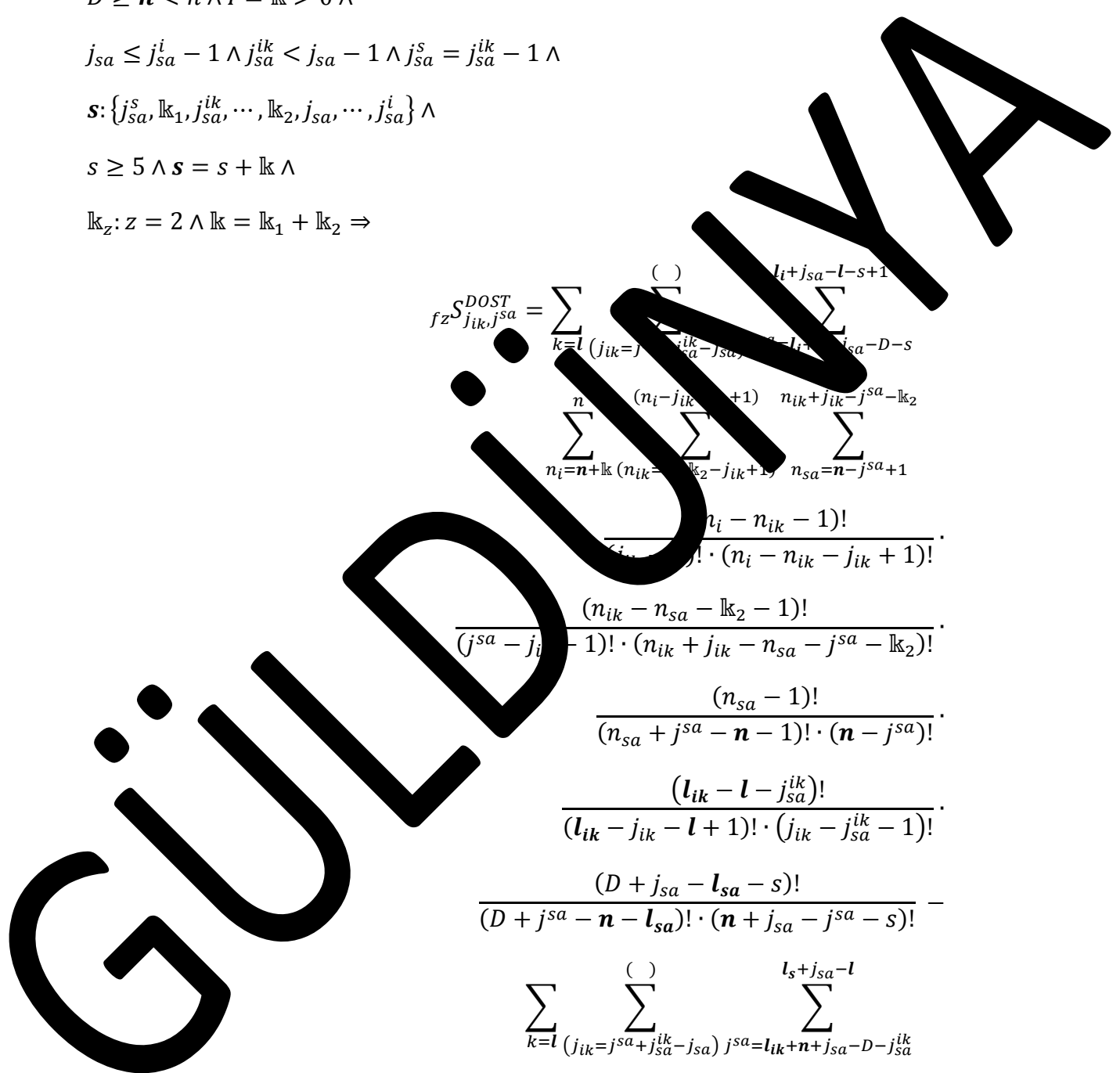
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{(l_i+l_{sa}-l-s+1)}^{(\quad)} \sum_{(j_{sa}-D-s)}^{(\quad)} \sum_{n_i=n+k}^n \sum_{(n_{ik}=k_2-j_{ik}+1)}^{(n_i-j_{ik}-1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \frac{(n_i - n_{ik} - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = j_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1$$

$$\mathbb{k}_1 + z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{ik}=l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n, n+k}^n \sum_{(n_{is} = \dots)}^{(n_i + 1)} \dots (j_{ik})$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1}^{(\dots)} \sum_{(n_{ik} = j_{sa} - k_2)} \dots \frac{(n_i - s - 1)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\dots \frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\dots \frac{(l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - l$$

$$l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n - l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D > n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{lk})!}{(n_i - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - l)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{lk}+2}^{l_i+j_{sa}-l-s+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(\)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=l_{sa}+n-l}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i+l_k-j_{ik})}^{(n_i+l_k+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_2}}^{(\)} \sum_{(n_{ik}-j_{sa}-l_{k_2})}^{(\)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - j_{sa}^{ik}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - l_{sa} < l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D > n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_{ik} j_{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(n_i - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!} + \\
&\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} j^{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n: n+l_k}^{n} \sum_{(n_{is} = n)}^{(n_i + 1)} j_{ik}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - l_{k_1} - j_{sa} - l_{k_2}}^{()} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}^a=j_{sa}+1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j_{ik} - l + 1)! \cdot (n_{sa} - j_{sa} - \mathbb{k}_2 - 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}^a=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

GÜLDÜŞMÜŞA

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} f_{z^s}^{j_{sa}^{ST}} &= \sum_{k=l}^n \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(n_i-j_{ik}-k_1+1)} \sum_{j_{sa}=j^{sa}+1}^{l_{sa}-l+1} \\ &\sum_{i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\ &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\ &\sum_{k=l}^n \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(n_i-j_{ik}-k_1+1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \end{aligned}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^s + s - n - l - j_{sa}^{sa})! \cdot (n - j_{sa}^s - j_{sa}^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_i + j_{sa}^{ik} - n - 1)$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_i + j_{sa}^{ik} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = i \wedge l_s = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\{s = 1, \dots, l_{k_1}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 &\frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(j_{ik} - 1)!}{(n_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - n_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 &\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 &\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \\
 &\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^k - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2$$

$$f_{z, l_{ik}, j_{sa}}^{DST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = l + j_{sa} - l + 1}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{sa} = n_i + j_{sa} - j^{sa} - k_2)}^{n_{ik} + j_{sa} - j^{sa} - k_2}$$

$$\frac{(n_i - j_{ik} - 1)!}{(n_i - n - 1)! \cdot (n_i - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - j_{sa} - k_2 - 1)!}{(n_{ik} + j_{sa} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

GÜLDENWA

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = i \wedge l_s > 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, i\} \wedge$$

$$s \geq 1 \wedge s = s + k \wedge$$

$$k_2: z = z + k = k_1 + k \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{k=l}^{(1+j_{sa}^{ik}-l)} \sum_{n_{sa}=n+l_{sa}-D-j_{sa}}^{l_{sa}-l+1} \dots$$

$$\sum_{n_i=n+l_{sa}}^n \sum_{(n_{ik}=n_{sa}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_2-1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

GÜLDEN

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-l_{k1})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i) \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{sa} \leq l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i) \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq (D + l_s + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i) \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i) \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{i,j_{ik},j_{sa}}^{DOST} = \sum_{k=l}^n \sum_{l_{ik}=l_{ik}+n-D}^{(j_{sa}+j_{sa}^{ik}-j_{sa})+l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \sum_{n_i=n+k}^n \frac{(n_i - j_{ik} - l + 1)!}{(n_{ik} - k_2 - j_{ik} + 1)!} \frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^n \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j_{ik}-l_{k_1}+1)} \frac{(n_i-j^{sa}-l_{k_2})!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
 & \frac{(l_i-l-j_{sa})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \\
 & \frac{(l_{sa}-l_{sa}-j_{sa})!}{(j_{ik}+j_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}-j_{sa}^{ik}-j_{sa})!} \cdot \\
 & \frac{(n+l_{sa}-n-s)!}{(n+l_{sa}-n-s)! \cdot (n+l_{sa}-j^{sa}-s)!} \cdot \\
 & \sum_{k=l}^n \sum_{\substack{(j_{ik}-j_{sa}^{ik}-j_{sa}) \\ (j^{sa}=l_i+n+j_{sa}-D-s)}}^{(j_{ik}-j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}} \frac{(n_i-j_s+1)!}{(n_i-n-l)! \cdot (n-s)!} \cdot \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{\substack{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \frac{(n_i-s-l)!}{(n_i-n-l)! \cdot (n-s)!} \cdot \\
 & \frac{(l_s-l-1)!}{(l_s+j_{sa}^{ik}-j_{ik}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j^{sa}+s-n-l_i-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > \mathbb{k} \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 = \mathbb{k}_1 + 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{l=1}^{(l_{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-j_{sa}}^{l_{sa}-l+1} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

GÜLDÜŞÜKA

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(l_s + j_{sa}^{ik} - l)}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - (n_i - j_s + 1))}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1}^{(n_{is} = n_{ik} + j_{sa}^{ik} - k_2)}$$

$$\frac{(l_i - 1)! \cdot (n - l - s)!}{(n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l)!}{(l_s + j_{sa}^{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - 1)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - 1 < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - j_{sa} \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D + j_{sa}^{ik} - 1 < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$

$D - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}=l_i+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}} \sum_{n_i=n+k}^{(n_i=j_{sa}-k_1-j_{sa}^{ik}+j_{sa}-k_2)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{sa}=n-k_2-j_{sa}^{ik}+j_{sa}-k_2)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

GÜLDÜZÜMÜYA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l = l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left(\sum_{k=1}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \right) + \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\begin{aligned}
 & \left(\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-i^{l+1}} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i - 1)!}{(n - j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \\
 & \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{()} \sum_{j^{sa}=j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - s - l_k)!}{(n_i - n - l_k)! \cdot (n - s)!} \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{zS}^{DOST}_{j_{ik}, j_{sa}} = \left(\sum_{k=i}^n \sum_{l(j_{ik}=j_{sa}^{ik})} \binom{l_{ik}+j_{sa}-i^l-j_{sa}^{ik}}{j_{sa}=l_{sa}+n-D} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) +$$

$$\left(\sum_{k=i}^n \sum_{l(j_{ik}=j_{sa}^{ik})} \binom{l_{sa}-i^{l+1}}{j_{sa}=l_{sa}+n-D} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot$$

GÜLDÜNYA

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S j_{sa}^{ST} = \sum_{k=i}^n \sum_{l=1}^{()} \sum_{j_{sa}^{sa} = j_{sa}}^{l_{sa} - i^{l+1}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=i}^{(\cdot)} \sum_{l}^{(\cdot)} \sum_{j^{sa}=j_{sa}}^{(\cdot)}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{(\cdot)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}^{(\cdot)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(D - l)!}{(D + s - l)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, l_{k_2}\} \wedge$$

$$s \geq 5 \wedge s = s + l \wedge$$

$$l_{k_2}: z \geq 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^{(\cdot)} \sum_{l}^{(\cdot)} \sum_{j^{sa}=j_{sa}}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^n \sum_{l(j_{ik}=j_{sa}^{ik})}^{()} \sum_{j_{sa}=j_{sa}^{ik}}^{()} \dots$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{()} \sum_{n_{sa}=n_i-j_{sa}^{ik}-k_2}^{()} \dots$$

$$\frac{(n_i - n_{ik} - k)!}{(n_i - n_{ik} - k)! \cdot (n - s)!} \cdot \frac{(D + s - n - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = i l > 0 \wedge$$

$$j_{sa} \leq j_{sa} - j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k_z = k_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^n \sum_{l(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j_{sa}=j_{sa}^{ik}}^{l_{ik}+j_{sa}-i l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=0}^{(j_{ik} - j_{sa}^{ik})} \sum_{j_{sa}^{ik} = k}^{(j_{ik} - j_{sa}^{ik})}$$

$$\sum_{n_i = n + \mathbb{k} - (n_{ik} - j_{ik} - l_{sa} - 1)}^n \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n - \mathbb{k})! \cdot (n - s)!}{(n_i - n - \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{ik} - j_{sa} \wedge$$

$$j_{sa} + j_{sa} - j_{sa} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s - l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > \mathbb{k}_2 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s \geq s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 \cdot 2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=i^l}^{(l_{sa} + j_{sa}^{ik} - i^l - j_{sa} + 1)} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{sa}=n-j^{sa}+1 \\ (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i l - j_{sa}^i)!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(j_{sa}^i - l_{sa} - s)!}{(D + s - n - 1)! \cdot (n - s)!} \cdot \sum_{k=i}^{\binom{()}{i}} \sum_{\substack{j_{ik}=j_{sa}^{ik} \\ j^{sa}=j_{sa}}} \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq i \wedge n \wedge l = i l \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa}^i \wedge$$

$$j_{ik} - j_{sa}^i - j_{sa}^{ik} \leq j_{sa}^i \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^i > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^i = l_{ik} \wedge$$

$$l_s \wedge l \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$lk_z: z = 2 \wedge lk = lk_1 + lk_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{ik}-i+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{ik}=n+lk_2-j_{ik}+1)}^{(n_i-j_{ik}-lk_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{ik}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - 1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - lk_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{sa} - j_{sa})!}$$

$$\frac{(l_{ik} - 1 - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - j_{sa} - l_{sa} - s)!}{(D + i - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(\)} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{ik}=n_i-j_{ik}-lk_1+1)}^{(\)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2}$$

$$\frac{(n_i - s - lk)!}{(n_i - n - lk)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{sa}+j_{sa}^{ik}-i-l-j_{sa}+1)} \sum_{(j_{sa}^s=j_{sa}^{ik}-1)}^{(j_{sa}-j_{sa}^{ik})} \sum_{(j_{sa}^s=j_{sa}^{ik}-1)}^{(j_{sa}-j_{sa}^{ik})} \sum_{(j_{sa}^s=j_{sa}^{ik}-1)}^{(j_{sa}-j_{sa}^{ik})} \dots$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)} \dots$$

$$\frac{(n_i - n_{ik})!}{(n_i - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - \dots - \mathbb{k}_2 - 1)!}{(j_{sa}^s - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i - l - j_{sa}^{ik})!}{(n_{ik} - j_{ik} - i - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \cdot \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{()} \sum_{j_{sa}^s=j_{sa}^{ik}}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2}^{()} \frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\left((D \geq n < n \wedge l = i - l \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = l_i > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^k - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \wedge$$

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^{l_{ik}-i^{l+1}} \sum_{(j_{ik}=j_{sa}^{ik})} l_{sa-i^{l+1}} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_{k_1}}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=0}^n \sum_{l=0}^k \sum_{j_{sa}^{ik}=j_{sa} - l} \binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \frac{(n_i - n_{ik} - l)! \cdot (n - s)!}{(D + s - n - l)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq j_{ik} + j_{sa} - s$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa} - l \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, j_{sa}, \dots, i\} \wedge$$

$$s \geq 5 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_z}: z = 2 \wedge l_{k_z} = l_{k_1} + 1 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=0}^n \sum_{l=0}^k \sum_{j_{sa}^{ik}=j_{sa} - l} \binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \frac{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}{j_{sa} = j_{sa}} \right) \sum_{n_i=n+l_{k_1}}^n \sum_{(n_i-j_{ik}-l_{k_1}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\left(\sum_{k=i^l}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}+1}^{n_{ik} - j_{ik} - j^{sa} - \mathbb{k}_2 + 1} \right)$$

$$\sum_{n_i=n+\mathbb{k}_2}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}-j_{sa}+1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=i^l}^{(l_{ik}-i^{l+1})} \sum_{(j_{ik}=j_{sa}^{ik})}^{l_{sa}-i^{l+1}} \sum_{j_{sa}=l_{ik}+j_{sa}-i^l-j_{sa}^{ik}+2}$$

$$\sum_{n_i=n+\mathbb{k}_2}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$



$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{\binom{D + j^{sa} - n - 1}{D + j^{sa} - n - 1}}{\binom{D + j^{sa} - n - 1}{D + j^{sa} - n - 1} \binom{D + j^{sa} - n - 1}{D + j^{sa} - n - 1}} \cdot \sum_{k=1}^n \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=j_{sa}} \binom{n}{n_{ik}+l_{ik}} \binom{n}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq 1 \wedge n \wedge l = i l \wedge l_{sa} \leq D - j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} - j_{sa}^{ik} + j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} - j_{sa}^{ik} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge$$

$$s \geq n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_{ik} j_{sa}}^{DOST} = & \left(\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \binom{l_{ik}-i^{l+1}}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - j_{ik} - i^{l+1})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(l_{ik} - j_{ik} - i^{l+1})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa} - s)!}{(D + j_{sa} - l_{sa})! \cdot (n - l_{sa})! \cdot (n - s)!} \right) + \\
& \left(\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \binom{l_{ik}-i^{l+1}}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - j_{ik} - i^{l+1})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(l_{ik} - j_{ik} - i^{l+1})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=i}^l \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_{sa}=n_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - s - 1)!}{(n_i - n_{ik} - 1)! \cdot (n_i - s)!} \cdot \frac{(D - l_i)!}{(D + s - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - 1 > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + j_{sa} - n - l_{k_1} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^{sa} - j_{sa}^{ik} -$$

$$s \in \{j_{sa}^{sa}, l_{k_1}, j_{sa}^{l_{k_2}}, l_{k_2}, j_{sa}^{l_{k_2}}, j_{sa}^{i_{k_2}}\} \wedge$$

$$s \geq l \wedge s = s + l_{k_2}$$

$$l_{k_2}: z = l_{k_2} \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=i}^l \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-i-l-j_{sa}^{ik}+1} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}-1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \right)$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\left(\sum_{k=i^l}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=l_{sa}+n-D}^{n_{ik} - j_{ik} - j^{sa} - \mathbb{k}_2 + 1} \right)$$

$$\sum_{n_i=n+\mathbb{k}_2}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=i^l}^{(l_{ik} - i^{l+1})} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa} - i^{l+1}} \sum_{j_{sa}=l_{ik}+j_{sa} - i^l - j_{sa}^{ik} + 2}$$

$$\sum_{n_i=n+\mathbb{k}_2}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

GÜLDENWA

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j^{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n_{sa} + j_{sa}^{ik} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - l_i + j_{sa}^{ik} - j_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s - j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, n\}$$

$$s \geq 5, \mathbb{k}_2 = s + \mathbb{k}_1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa}^{ik} - 1 > l_s - s = l_s - s \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, l_{sa}\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^D \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \sum_{i=0}^{(l_{sa} - i l - s + 1)} \sum_{j_{ik}=l_i + n + j_{sa}^{ik} - D - s}^{(l_{sa} - i l - s + 1)} \sum_{j_{sa}^{ik}=j_{ik} + j_{sa} - j_{sa}^{ik}}^{(l_{sa} - i l - s + 1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = i_l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^{l_i+j_{sa}-i-s+1} \sum_{j=j_{sa}^{ik}}^{j_{sa}-1} \sum_{l=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-i-s+1} \frac{(n_i-j_{sa}^{ik}+k_1+1) \cdot n_{ik}+j_{ik}-j_{sa}-k_2}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-k_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-j_{sa}-l_{ik})! \cdot (j_{sa}-j_{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$D \geq n < n \wedge l = i_l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^{(l_{ik} - i^{ik})} \sum_{l=i}^{(l_i + n - D)} \sum_{j=j_{sa} - n + j_{sa} - D - s}^{l_i + j_{sa} - 1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i^{ik} - j_{sa})!}{(l_{ik} - j_{ik} - i^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^{\binom{D}{k}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}^a=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_{ik}+\mathbb{k}_1+1)}^{(n_i-j_{ik}+\mathbb{k}_1+1)} \sum_{(n_{ik}=n_i-j_{ik}+\mathbb{k}_2)}^{n_{ik}+j_{ik}-\mathbb{k}_2} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}=n-j_{sa}+1}$$

$$\frac{(n_i - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}{(j_{sa}^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{ik} + j_{sa} - \mathbb{k}_2 - 1)!}{(n_{sa} - 1)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa}^a - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \cdot \sum_{k=1}^{\binom{D}{k}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}^a=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{\binom{D}{k}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{(n_i - s - \mathbb{k})!}$$

$$\frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = \mathbb{k} \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^n \sum_{i=1}^n \sum_{j_{sa}^{ik}=j_{sa}}^{j_{sa}^{ik}} j_{sa}^{ik} \binom{n}{n_i=n+\mathbb{k}_1, n_i=n+\mathbb{k}_2, n_i+1} \binom{n}{n_{sa}=n-j_{sa}+\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \frac{(n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l = \mathbb{k} \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = \mathbb{k} \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{k=1}^n \sum_{i=1}^{l_{sa}-i+1} \sum_{j_{sa}=j_{sa}}^{l_{sa}-i+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=0}^{\lfloor l \rfloor} \sum_{i=0}^{\binom{D-l}{k}} \sum_{j_{sa}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{D-l}{k}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}}$$

$$\frac{(n_i - s - k)!}{(n_i - n - k)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l = \lfloor l \rfloor \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l = \lfloor l \rfloor \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_i \leq D + l_{sa} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l = \lfloor l \rfloor \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=i}^n \sum_{l(j_{ik}=j_{sa}^{ik})}^{()} \sum_{j_{sa}=l_{sa}+n-}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+}^{(n_i-j_{ik}-k_1+1)} \sum_{=n-}^{n_{ik}+} -j_{sa}-k_2} \sum_{=n-}^{n_{ik}+} -j_{sa}-k_2}$$

$$\frac{(n_{ik}-n_{ik}-1)!}{(j_{sa}-2)! \cdot (n_{ik}-n_{ik}-j_{ik}+}$$

$$\frac{(n_{ik}-n_{ik}-1)!}{(j_{sa}-j_{ik}-) \cdot (n_{ik}-j_{ik}-n_{sa}-k_2)!}$$

$$\frac{(n_{ik}-n_{ik}-1)!}{(n_{sa}-n_{sa}-n-1)! \cdot (n-j_{sa})!}$$

$$\frac{(l_{sa}-j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}-j_{sa}^{ik}-j_{sa}-l_{ik})! \cdot (j_{sa}-j_{sa})!}$$

$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D-j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$((D \geq n < \wedge l = \wedge l_s \leq D - n +$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa} - j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^n \sum_{l=j_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-i-l-j_{sa}+1} \sum_{j_{sa}^{ik}-j_{sa}}^{j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}^{ik}-j_{sa}}^{j_{sa}^{ik}-j_{sa}} \sum_{n_i=n+\mathbb{k}_1}^n \sum_{j_{ik}+1}^{(n_i-j_{ik}-1)} \sum_{n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik})!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - j_{ik} - \mathbb{k}_2 - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(l_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i - l - j_{sa}^{ik})!}{(j_{ik} - j_{ik} - i - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} + j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOST} S_{j_{ik}, j_{sa}}^{j_{sa}^{ik}} = \sum_{k=i}^{n-j_{sa}^{ik}+1} \sum_{l=j_{sa}^{ik}-k}^{n-j_{sa}^{ik}+1-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_{sa}-j_{ik}+1}^{n_i-j_{ik}-\mathbb{k}_2} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n) \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} = j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa}^{ik} > l_{ik} - l_i + j_{sa} - j_{sa}^{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$D \geq n < n \wedge l = i l \wedge l_s > 0 \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^{ik} - j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{ik}, l_{k_1}, j_{sa}^{ik}, \dots, j_{sa}^{ik}, \dots, j_{sa}^{ik}\}$$

$$s \geq 5, l_{k_2} = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_1} \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{ik}}} = \sum_{k=i}^l \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-i+1)} \sum_{(j_{sa}^{ik}=l_{sa}^{ik}+n-D)}^{l_{sa}^{ik}-i+1}$$

$$\sum_{n_i=n+l_{k_1}}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}$$

$$l_{sa} > D + l_s + j_{sa} - n - 1) \wedge$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_{ik} \wedge$$

$$l_{sa} > D + l_{ik} + j_{sa} - j_{sa}^{ik}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > l \wedge$$

$$j_{sa}^{s-1} = j_{sa}^{s-1} \wedge j_{sa}^{s-1} = j_{sa}^{s-1} \wedge j_{sa}^s = j_{sa}^{s-1} \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{s-1}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$j_{sa}^i = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!}$$

$$\left((D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s - l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} - l_{ik} \wedge$$

$$l_{sa} > D + l_s - j_{sa} - n - 1 \vee$$

$$(D < n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{ik} + 1 > l_s \wedge$$

$$(l_{sa} > D + l_{ik} + j_{sa} - n - j_{sa}^{ik})) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{ik}-i+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-i+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - j^{sa} - k_2 - 1)!}{(n_{sa} - j^{sa} - k_2 - 1)! \cdot (n_{sa} - j^{sa} - k_2 - 1)!}$$

$$\frac{(l_{sa} - j_{sa}^{ik} - l_{sa} - j_{sa})!}{(j_{ik} - l_{sa} - j^{sa} - k_2 - 1)! \cdot (j^{sa} - j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l = i l \wedge l_s = D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa} - j_{sa}^{ik} - l_{ik} \wedge$

$l_{sa} > (l_{sa} + l_s + j_{sa} - n - 1) \vee$

$(D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{sa} - j_{sa}^{ik} + 1 > l_s \wedge$

$l_{sa} > D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + l \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_{z^S}^{DOST} = \sum_{k=i}^n \sum_{l=(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-i+1)} \sum_{j_{sa}=l_{sa}+n-l}^{l_{sa}-i+1} \sum_{n_i=n+l_{k_1}}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{j_{sa}^i=n-l_{k_2}+1}^{n_{ik}+j_{sa}-l_{k_2}} \frac{(n_i+n_{ik}-1)!}{(j_{sa}^i-2)! \cdot (n_i+n_{ik}-j_{ik}+1)!} \cdot \frac{(n_{ik}-j_{sa}-l_{k_2}-1)!}{(n_{ik}-j_{ik}-n_{sa}-l_{k_2})!} \cdot \frac{(n_{sa}+j_{sa}^i-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-i-l-j_{sa}^{ik})!}{(l_{ik}-i-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\begin{aligned} & ((D+n < n \wedge l_s) \wedge (j_{sa}^i - n + 1) \leq j_{sa}^i - n + 1) \wedge \\ & (j_{sa}^{ik} + 1 \leq j_{sa}^i \leq j_{sa}^i + j_{sa}^i - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq n + j_{sa} - s \wedge \\ & (l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee \\ & (j_{sa}^i \geq n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \\ & j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^i \leq n + j_{sa} - s \wedge \\ & (l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee \end{aligned}$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik})) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$DOST_{j_{sa}} = 0$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_{ik}, j^{sa}}^{DOST} = & \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D} \binom{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1}{j^{sa}} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left(\sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j^{sa}=l_{sa}+n-D} \binom{j^{sa}+j_{sa}-j_{sa}^{lk}-1}{j^{sa}} l_{ik}+j_{sa}-l-j_{sa}^{lk}+1 \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{(j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - l_{k_1} - 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2} - 1)!} \cdot$$

$$\frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa} - j^{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - j_{sa}^{ik} - 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - j_{sa}^i \wedge j_{sa} < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_1 : z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik} = l_{ik} + n - D)}^{(l_{ik} - l + 1)} \sum_{(j^{sa} = l_{sa} + n - D)}^{l_{sa} - l + 1}$$

$$\sum_{n_{ik} = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{()}{l_{ik} + j_{sa}^{ik} - j_{sa}^{ik} + 1}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(l_i + n + j_{sa}^{ik} - D - s)} \sum_{(n_i - j_s)} \sum_{(n_i + k)} \sum_{(n_i + k + j_{sa}^{ik} - j_{ik})} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - k_1)} \sum_{(n_{ik} = n_{ik} + j_{ik} - j^{sa} - k_2)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge n > D - l_i + 1 \wedge \\ & 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee \\ & (n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \end{aligned}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \Big) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} j_{sa}=j_{ik}+j_{sa}^{ik} \right. \\ \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\ \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D} \right. \\ \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\ \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \\ \left. \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{ik}-l)} \cdot \\
 & \sum_{n_i=n}^n \sum_{(n_{ik}=n+l_{ik}+j_{ik}+1)}^{(n_{ik}-j_{sa}-l_{k_2})} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}-j^{sa}-l_{k_2})} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{sa} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-l+1)} \cdot \\
 & \sum_{n_i=n+l_{k_1}}^n \sum_{(n_{is}=n+l_{k_1}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDENWA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \dots$$

$$\mathbb{k}_2 : z = 2 \wedge \dots = \mathbb{k}_1 + \dots \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{l_s+j_{sa}-l}^{n_{sa}=n-j^{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \right)$$

$$\begin{aligned}
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_s + n - D}^{l_s + j_{sa} - l} \right) \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_1 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_s - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}^{l_s - l + 1} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \binom{l_s + j_{sa}^{ik} - l}{j_{ik} = l_s + n + j_{sa}^{ik} - j_{sa} - 1} j^{sa} = l_s + n - j_{sa} - 1 \\
 & \sum_{n_i = n + l_{ik} - n_{ik} - j_{sa} - 1}^n \binom{n - j_{ik} - l_{ik} - j_{sa} - l_{k_2}}{n_{ik} = n + l_{k_2} - j_{ik} - j_{sa} - l_{k_2}} \cdot \binom{n_{ik} - j_{ik} - j_{sa} - l_{k_2}}{n_{sa} = n - j^{sa} + 1} \\
 & \frac{(n_{ik} - j_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{ik} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l} \binom{()}{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_s + j_{sa} - l} \\
 & \sum_{n_i = n + l_{k_2}}^n \binom{(n_i - j_s + 1)}{n_{is} = n + l_{k_2} + j_{sa}^{ik} - j_{ik}}
 \end{aligned}$$

GÜLDÜZMAYA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k}: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{(l_s + j_{sa}^{lk} - l)}{j_{ik}=l_s + n + j_{sa}^{ik} - D - 1}} \sum_{\binom{l_{sa} - l + 1}{j_{sa}=l_{sa} + n - D}} \sum_{n_{ik}=n+\mathbb{k}}^n \sum_{\binom{(n_i - j_{ik} - \mathbb{k}_1 + 1)}{n_{ik}=n+\mathbb{k}_2 - j_{ik} + 1}} \sum_{\binom{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}{n_{sa}=n - j^{sa} + 1}} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D) \wedge (n_{ik} = j_{ik} + j_{sa}^{ik} - j_{sa}^{ik})} \sum_{(n_i - j_s) \wedge (n_i + \mathbb{k} \wedge (n_{is} + \mathbb{k} + j_{sa}^{ik} - j_{ik}))} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1) \wedge (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s < D - n - 1 \wedge$$

$$2 \leq l_s < D + l_{ik} + j_{sa}^{ik} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} + j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_s = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$n > n - l_i \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \left. \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(n + j_{sa} - j^{sa} - s)!} \right) + \\ \left(\sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \left. \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right)$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} - l + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k + j_{sa}^{ik} - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_s = n + k + j_{sa}^{ik} - j_{sa} - k_2 + 1)}^{n_{ik} + j_{sa} - j_{sa}^{ik} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - l_{sa} - n_{ik} - k_1 + 1)! \cdot (n_i - n_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - l_{sa} - n_{ik} - k_2 - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{sa} - l - j_{sa}^{ik})!}{(l_{ik} - l_{sa} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

GÜLDÜZMAYA

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f_{z^s}^{ST} j_{sa}^{ik} &= \sum_{k=l}^{n_i} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\ &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \end{aligned}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k+j_{sa}^{lk}-j_{sa}}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k1}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-l_{k2}}}^{(n_{ik}-j_{sa}-l_{k1})}$$

$$\frac{(l_s - l_{k1} - l_{k2})!}{(l_s + j_{sa} - j_{sa}^{lk} - l_{k1} - l_{k2})! \cdot (j_{sa} - j_{sa}^{lk} - 1)!} \cdot \frac{(D - l_{k1} - l_{k2})!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{lk} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} \leq n - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{lk} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = l_{k1} + l_{k2} = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1, j_{sa}^{lk} < j_{sa}^s - 1 \wedge j_{sa}^s < j_{sa}^{lk} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, l_{k1}, j_{sa}^{lk}, \dots, j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$l_{k1} \geq 6 \wedge l_{k2} \geq s + l_{k1} \wedge$$

$$l_{k2}: z \geq 2 \wedge l_{k2} \geq l_{k1} \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}} \sum_{l_{sa}-l+1}^{l_{sa}-l+1} j^{sa=l_{ik}+n+j_{sa}-D-j_{sa}^{lk}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{ik}=n+l_{k2}-j_{ik}+1}}^{(n_i-j_{ik}-l_{k1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k2}}$$

$$\frac{(n_i - n_{ik} - l_{k1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}^{sa}=l_i+n+j_{sa}-D)}$$

$$\sum_{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n \wedge n \wedge l_s > D - 1 + 1 \wedge$
 $j_{sa}^{ik} + 1 \leq j_{ik} < j^{sa} + j_{sa} - j_{sa} \wedge$
 $j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$
 $D - 1 + 1 \wedge n \wedge l = \mathbb{k} > 0 \wedge$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$lk_z: z = 2 \wedge lk = lk_1 + lk_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{ik}=n+lk_2-j_{ik}+1)}^{(n_i-j_{ik}-lk_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-lk_2}$$

$$\frac{(n_i - n_{ik} - lk_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - lk_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - lk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{sa} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-lk_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-lk_2)}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa})} \sum_{(j_{ik} = l_i + n - l - j_{sa}^{ik})} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n - j_{sa}^{ik} + 1)}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n_{ik} - k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - j_{ik} - k_1 - 1)!}{(j_{ik} - k_1)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} -$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z, S, D, T}^{j_{sa}} = \sum_{k=l} \sum_{\binom{j^{sa}+j_{sa}^{ik}-j_{sa}}{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}} \sum_{\binom{l_s+j_{sa}-l}{j^{sa}=l_i+n+j_{sa}-D-s}} \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}} \sum_{\binom{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}{n_{sa}=n-j^{sa}+1}} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D)}^{l_i + j_{sa} - l - s + 1} \sum_{(j_{sa} = l_s + j_{sa}^{ik} - l + 1)} \\
 & \sum_{n_i = n + k}^n \sum_{(n_i - j_{ik} = k - 1)}^{(n_i - j_{ik} - 1)} \sum_{(n_{ik} = n - j_{sa} + 1)}^{n_{ik} + j_{ik} - j_{sa} - k_2} \\
 & \frac{(n_{ik} - j_{ik} - k_1)!}{(j_{ik} - k_1)! \cdot (n_{ik} - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - j_{ik} - k_2)!}{(j^{sa} - k_2 - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_{sa} + n - D} \\
 & \sum_{n_i = n + k}^n \sum_{(n_i = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_i + j_{sa}^s - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{()}
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik}^{DOST} = \sum_{(l_i+n+j_{sa}^{ik}-D-s-1)}^{l_i+j_{sa}-l-s+1} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{j^{sa}=l_i+n+j_{sa}-D-s} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{l_i + j_{sa} - l - s + 1} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - k_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - k_2 - 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa}^{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{(l_{ik} - l + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + 1 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{l_{sa} - l}{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}} \sum_{n_i = n + k}^{\binom{l_{sa} - l}{n_i = n + k + j_{sa}^{ik} - j_{ik}}} \sum_{n_{ik} = n_{is} + \dots}^{\binom{l_{sa} - l}{n_{ik} = n_{is} + \dots - j_{sa}^{ik} - k_1}} \dots$$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} - 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(n_i - j_s + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n_i - j_s + 1)}$$

$$\sum_{n_i = n + k}^{(n_i - k_1 + 1)} \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_i - j_s + 1)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(n_i - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(n_i - j_s + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n_i - j_s + 1)}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{()}$$

GÜLDÜZMÜNYA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1, j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^l\}$$

$$s = 6 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: \dots = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{l_{sa} + j_{sa} - l}{n_i}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_{sa} + j_{sa} - l} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n + l \wedge l > D - n + 1 \wedge$$

$$j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n + l \wedge l_s > D - n + 1 \wedge$$

$$j_{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n + l \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}+j_{sa}-\mathbb{k}_2)} \frac{(n_{sa}-n_{ik}-l-1)!}{(j_{ik}-2)! \cdot (n_{sa}-j_{sa}-\mathbb{k}_1+1)!} \cdot \frac{(n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}+n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)} \frac{(n_i-s-l)!}{(n_i-n-l)! \cdot (n-s)!} \cdot \frac{(l_s-l-1)!}{(l_s+j_{sa}^{ik}-j_{ik}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{D-s} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1 \sum_{j^{sa} = l_i + n + j_{sa} - D - s}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n+l_k-j_{sa}+1)}^{n_{ik}+j_{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - l_{k_1} - 1)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - l_{k_2} - 1)! \cdot (n_{ik} - n_{sa} - j_{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j_{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

GUIDANCE

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z \geq 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} \sum_{k=l}^{DOST} \sum_{j_{ik} j_{sa}^{ik}} &= \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s} \\ &\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\ &\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-l_{sa})}^{(l_i+l-s+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \\
 & \sum_{n_i=n+l_{sa}}^n \sum_{(n_i-j_{ik}+1)}^{(n_{ik}+j_{ik}-l_{sa})} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-l_{sa})} \\
 & \frac{(n_{ik}-j_{ik}-l_{sa}+1)!}{(j_{ik}-l_{sa}-1)! \cdot (n_{ik}-n_{sa}-j_{ik}-l_{sa}+1)!} \cdot \\
 & \frac{(n_{ik}-j_{sa}-l_{sa}-l_{sa}+1)!}{(j^{sa}-l_{sa}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{sa})!} \cdot \\
 & \frac{(n_{sa}-1)!}{(j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \\
 & \sum_{n_i=n+l_{sa}}^n \sum_{(n_{is}=n+l_{sa}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{sa}-l_{sa}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{sa})}^{()}
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_{z^S} S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \\
&\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
&\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
&\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
&\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{l_s+j_{sa}-l}^{()} j^{sa=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i+l_k-1)}^{(n_i+l_k+1)} \sum_{(n_i+l_k-j_{ik})}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-l_{ik}}^{()} \sum_{(n_i-s+l_k)}^{()} \frac{(n_i-s+l_k)!}{(n_i-n-l)! \cdot (n-s)!}$$

$$\frac{(l_s-l-1)!}{(l_s+j_{sa}^{ik}-j_{sa}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_i)!}{(D+j^{sa}+n-l_i-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s - \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \end{aligned}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{POST}^{sa} = \sum_{k=l}^{n+j_{sa}^{ik}-j_{sa}-1} \sum_{j_{ik}=k+n-D}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n-j^{sa})}^{(n_i+j_{ik}-j^{sa}-l_{k_2})} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} - 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \\
& \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^n \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_i-j_s+1)} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fzS_{k,j_{sa}}^{DOS1} = \sum_{k=l}^n \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(j_{ik}-k_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{sa}=n+k+j_{sa}^{ik}-j_{ik}+1)} \frac{(n_{sa}-l-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(n_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-k_2)!} \cdot \frac{(n_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-k_1+1)!}{(n_{ik}-n_{sa}-k_1-1)!}$$

$$\sum_{k=l}^n \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(j_{ik}-k_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{sa}=n+k+j_{sa}^{ik}-j_{ik}+1)} \frac{(n_{sa}-l+1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(n_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-k_2)!} \cdot \frac{(n_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-k_1+1)!}{(n_{ik}-n_{sa}-k_1-1)!}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} -$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} \sum_{k=l}^{OST} \sum_{j_{ik}, j^{sa}} &= \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\ &\sum_{n_{ik}=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \end{aligned}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n - j_{ik})}^{(n_i - \mathbb{k} + 1)} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1 - \mathbb{k}_2)}^{(\quad)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + \dots - \dots$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > \dots$$

$$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$j_{sa}^{ik} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\quad)} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_i + j_{sa} - l - s + 1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_i - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_s - l - j_{sa} - s)!}{(l_s + j_{sa} - n - 1)! \cdot (n - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{\binom{()}{l}} \sum_{\substack{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa} \\ j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}} \sum_{l_s+j_{sa}-l} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1}^{\binom{()}{n}} \sum_{\substack{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$n_i \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \dots$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_i - j_{ik} - l + 1)}^{(n_i - j_{ik} - l + 1)} \sum_{(n_{sa} = n - j_{sa} + 1)}^{(n_{sa} = n - j_{sa} + 1)} \dots$$

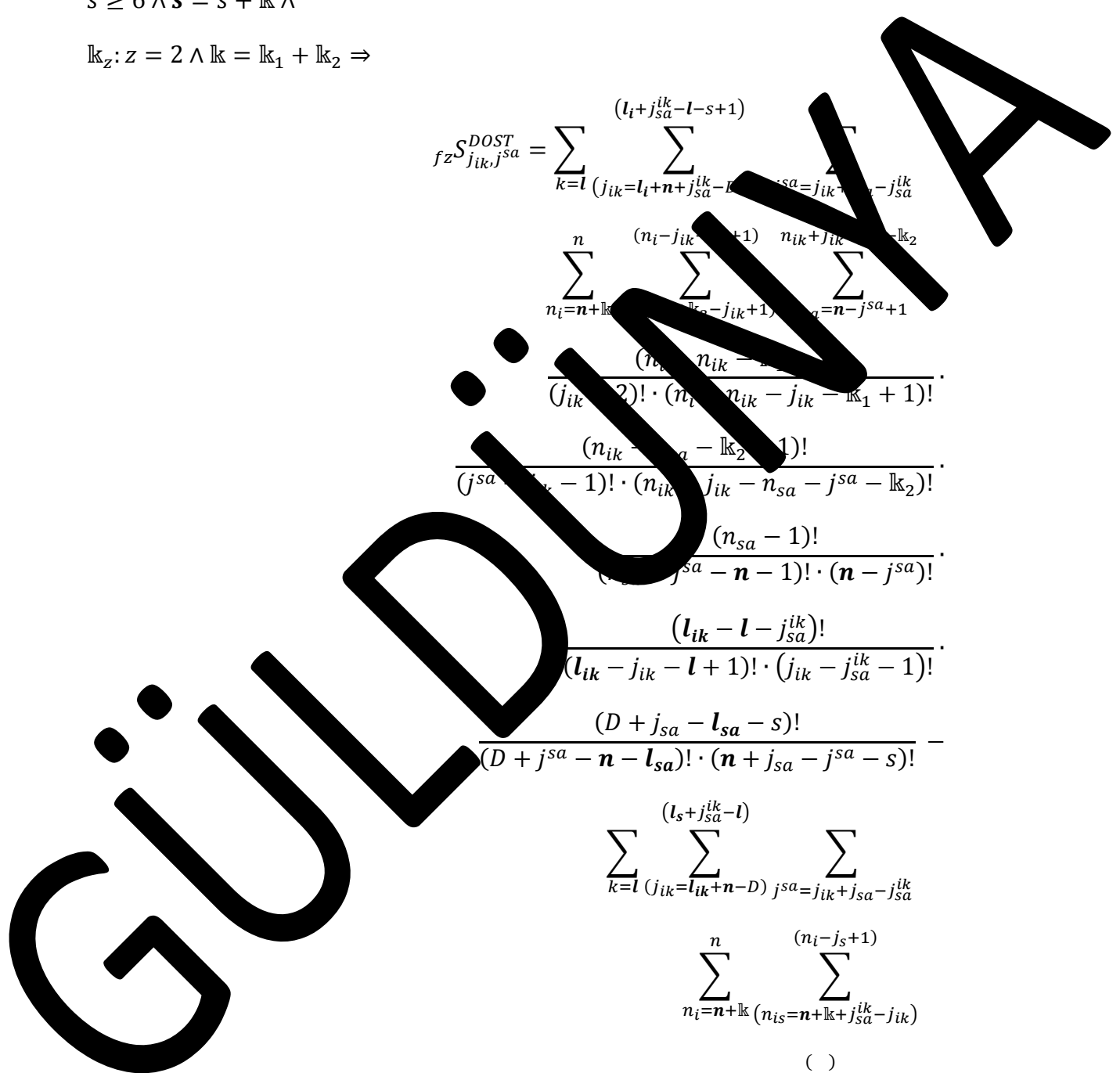
$$\frac{(n_{ik} - j_{ik} - l + 1)! \cdot (n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - l - 2)! \cdot (n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - j_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - l - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \dots$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \dots$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \dots$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()} \dots$$

$$\frac{(n_i - s - I)!}{(n_i - n - I)! \cdot (n - s)!} \dots$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}^{l_s + j_{sa} - l}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik} = l_s + n + j_{sa}^{ik} - D}^{j_{ik} = l_s + n + j_{sa}^{ik} - l + 1} \cdot \\
 & \sum_{n_i = n + k_1}^n \sum_{n_{ik} = j_{ik} + 1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - k_2} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_1)!}{(j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_i + n + j_{sa} - D - s} \\
 & \sum_{n_i = n + k_1}^n \sum_{(n_{is} = n + k_1 + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{()}
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge \end{aligned}$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^l\}$$

$$s: 6 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: \dots = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D} \\ &\sum_{n_{ik} = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \end{aligned}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{j_{ik} - j_{sa} - 1} \sum_{j_{sa}=j_{ik} + j_{sa} - j_{sa}}^{j_{sa} - j_{ik} - 1} \frac{n_{i_1} \cdot \dots \cdot n_{i_k} \cdot j_{sa} - \mathbb{k}_2}{n_i = n + \mathbb{k}_1, n_{ik} = n + \mathbb{k}_2, n_{i_1} = j_{ik} + 1, n_{sa} = n - j^{sa} + 1} \cdot \frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(j_{ik} - n_{ik} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (j_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{ik}=l_i + n + j_{sa}^{ik} - D - s}^{j_{ik} - j_{sa} - 1} \sum_{j_{sa}=j_{ik} + j_{sa} - j_{sa}}^{j_{sa} - j_{ik} - 1} \sum_{n_i = n + \mathbb{k}_1}^n \sum_{n_{is} = n + \mathbb{k}_2 + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)}$$

GÜLDENWA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_1 + z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_s+j_{sa}-l} \sum_{j^{sa}=j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = l_s + j_{sa}^{ik} - l + 1}^{j_{sa}^{ik} - l + 1} \dots \\
 & \sum_{n_i = n + k_1}^n \sum_{n_{ik} = j_{ik} + 1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \dots \\
 & \frac{(n_{ik} - j_{ik} - k_1)!}{(j_{ik} - k_1)! \cdot (n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - j_{ik} - k_2)!}{(j_{sa} - k_2 - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{j_{sa} = j_{sa}^{ik} - j_{sa}}^{l_s + j_{sa} - l} \sum_{j_{sa} = j_{sa} + 1}^{l_s + j_{sa} - l} \dots \\
 & \sum_{n_i = n + k_1}^n \sum_{n_{is} = n + k_1 + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)} \dots \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{()} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}^{()} \dots
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 =$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{sa}=j_{sa}+1)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{sa} + 2} \right. \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}} \sum_{n=n+l_k}^n \sum_{(n_{is}=n-l_k)}^{(n_i+l_k+1)} \sum_{(n_{ik}=n-l_k-j_{sa}-l_{k_2})}^{(n_i+l_k+1)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(n - l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$j_{ik}^{ik} \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + j_{sa}^{ik} \leq j_{sa} \leq j_{ik} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$D > n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^i, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_{ik} j_{sa}}^{DOST} = & \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\
& \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_s+j_{sa}^{ik}-j_{sa}-1} \sum_{j_{sa}=j_{sa}+2}^{l_s+j_{sa}-l} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - k_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - k_2 - 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - k_1 + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - k_1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{DOST} = \left(\sum_{k=l}^{(l_{ik}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right) \cdot \frac{(n_i - n_{ik} - k_1 + 1)}{\sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i - n_{ik} - k_1 + 1)}} \cdot \frac{n_{ik} + j_{ik} - j^{sa} - k_2}{\sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik} - n_{sa} - k_2 - 1)}}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{(l_{sa}-l+1)} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa}^{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik} - 1)! \cdot (j^{sa} + j_{ik} - j_{sa} - j_{sa}^{ik})!} \cdot \\
 & \left(\frac{(D - j_{sa} - l_{sa} - s)!}{(n + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{\substack{j_{ik}=j_{sa}^{ik}+1 \\ (j_{ik}=j_{sa}^{ik}+1)}}^{l-1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}} \\
 & \sum_{\substack{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1} \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}} \sum_{\binom{(\cdot)}{(\cdot)}} \\
 & \frac{(n_i - s - I)!}{(n_i - n - I)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOST} = \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_{sa} - n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \right)$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j^{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa} - 1)! \cdot (D + j^{sa} - n - l_{sa} - s)!} \cdot \sum_{k=0}^{(j_{sa}^{ik}-l)} \sum_{l_{ik}=j_{sa}^{ik}+1}^n \sum_{n_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_i-j_s+1)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$n \geq n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$D \geq n < n \wedge l = k > 0 \wedge$

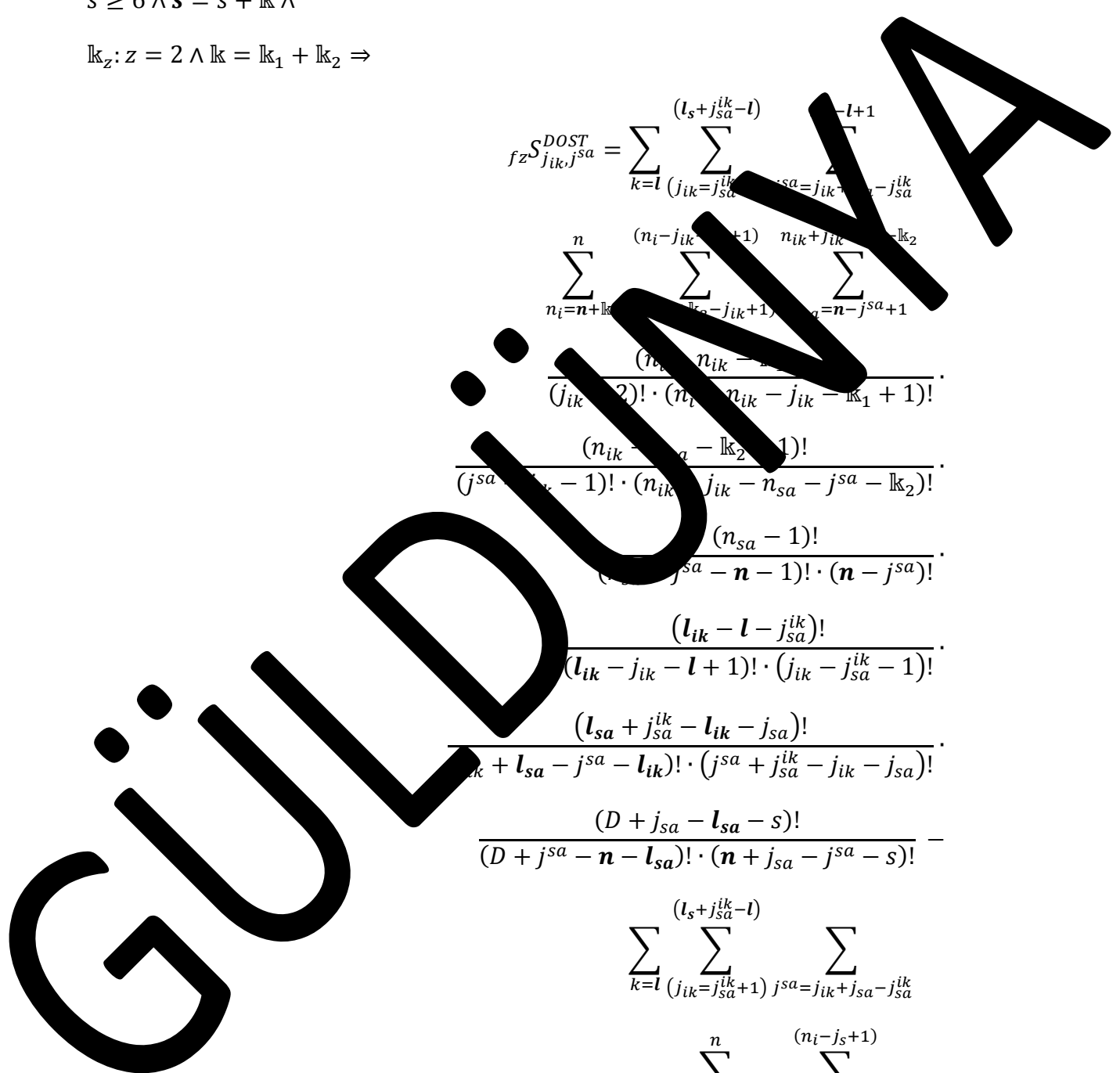
$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$fz_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} - l + 1)} \sum_{(n_i = n + k)}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_{ik} + 1)} \sum_{(n_{sa} = n - j_{sa} + 1)}^{(n_{ik} + j_{ik} - k_2)} \frac{(n_{ik} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - k_1 + 1)! \cdot (n_{ik} - n_{sa} - k_2 + 1)!}{(j_{sa}^{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - k_2)! \cdot (n_{ik} - n_{sa} - 1)! \cdot (n - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(k + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{()}$$



$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^l, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{ik, j^{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{(n_i=n+k)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \right)$$

$$\begin{aligned}
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik}} \sum_{j^{sa} = l_{sa} + n - D}^{n_{ik} + j_{sa} - j^{sa} - l_{sa} - 1} \right. \\
& \sum_{n_i = n + l_{sa}}^n \sum_{(n_{ik} = n + l_{sa} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{sa} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{sa} - j^{sa} - l_{sa} - 1} \\
& \frac{(n_i - n_{ik} - l_{sa} - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} - l_{sa} - l_{sa} - 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j^{sa} - l_{sa} - 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik} - j_{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}^{n_{ik} + j_{sa} - j^{sa} - l_{sa} - 1} \\
& \sum_{n_i = n + l_{sa}}^n \sum_{(n_{ik} = n + l_{sa} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{sa} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{sa} - j^{sa} - l_{sa} - 1} \\
& \frac{(n_i - n_{ik} - l_{sa} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{sa} - l_{sa} - 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j^{sa} - l_{sa} - 1)!}
\end{aligned}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(l_{ik}=l_{i}+n+j_{sa}-D-j_{sa}^{ik}+1)}^{()} \sum_{(j_s+1)}^{()} \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$D + l_{sa} + j_{sa} - j_{sa}^{ik} + 2 \leq l \leq i - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n}^{n} \sum_{(n_{ik}=n+k_2-j_{ik})}^{(n_i-j_{ik}-k_1+1)} \sum_{(n_{sa}=n_{sa}+1)}^{(n_{ik}-j_{sa}-k_2)} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - j_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - k_2)!} \cdot \frac{(n_{sa} - j_{sa} - 1)!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(n - l - j_{sa}^{ik})!}{(n - j_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot j_{sa}^{ik}! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(\quad)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

GÜLDENYA

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa} = l_{sa} + n - D \right)$$

$$\sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_{ik}-k_1+1)}{(n_{ik}=n+k_2-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}$$

$$\sum_{n_i = n + \mathbb{k}_k}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}_k}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{\binom{()}{l_s - l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(n_i+n+l_{sa}-D-s)} \sum_{(n_i-j_s)} \sum_{(n_i+l_k+n+l_{sa}+j_{sa}^{ik}-j_{ik})} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1})} \sum_{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l = l \wedge l_s \leq D - n - 2 \wedge$
- $D + l_{sa} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq l - 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 = j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $j_{sa}^{ik} - j_{sa} < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$
- $D \geq n < n \wedge l = l > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

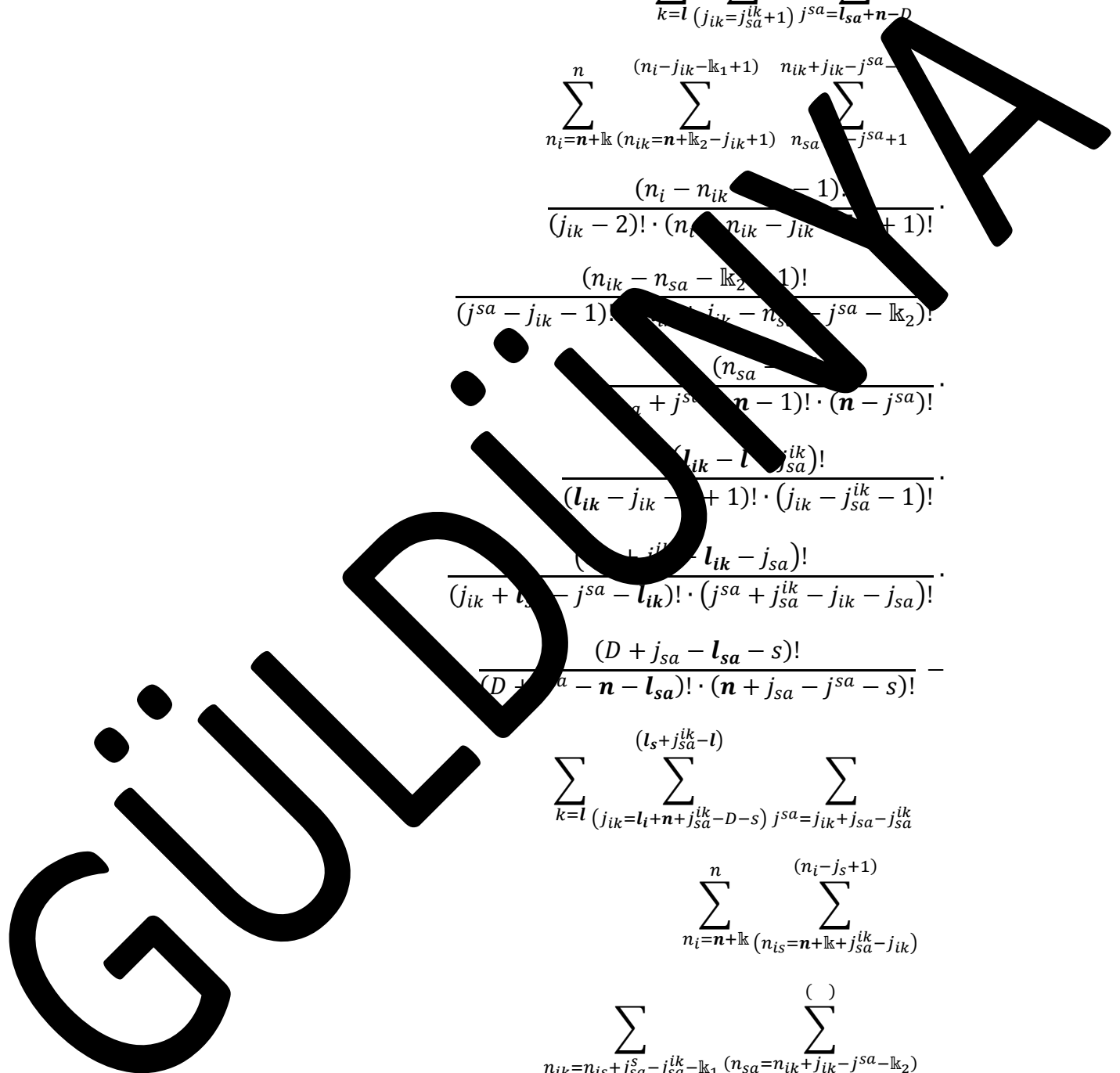
$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - \mathbb{k}_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{(l_{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

GUIDANCE

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+l_k}^n \sum_{(n_i-s+1)}^{(n_i-s)} \sum_{(n_i-s-j_{ik})}^{(n_i-s-1)} \frac{(n_i-s-1)!}{(n_i-n-l)! \cdot (n-s)!} \cdot \frac{(j_{sa}-l-1)!}{(j_{sa}+j_{sa}^{ik}-j_{ik}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_i)!}{(D+j_{sa}+j_{sa}^{ik}-n-l_i-j_{sa})! \cdot (n+j_{sa}-j_{sa}^{ik}-s)!}$$

- $D \geq n < n \wedge l = 1 \wedge l_s \leq D - n - 1 \wedge$
- $2 \leq l \leq D - l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_s \leq j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$
- $D \geq n < n \wedge l = k > 0 \wedge$
- $j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$
- $s \geq 6 \wedge s = s + k \wedge$
- $k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$\begin{aligned}
f_z S_{j_{ik}, j^{sa}}^{DOST} = & \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \right. \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left(\sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{sa} - l + 1} \right. \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n-l_{k_2}-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - l_{k_2} - j^{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa}^{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j_{ik}-k_1+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}=n+k_2-j_{ik}+1)} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j_{ik}-k_1+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_{ik}+j_{ik}-j^{sa}-k_2)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - \mathbb{k}_1) \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq \dots + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq \dots \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{ik}}} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik})} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{(n_{is} + \mathbb{k} (n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik}))} \sum_{(j_s = j_s + 1)}$$

$$\sum_{(n_{is} + j_{sa}^s - j_{sa}^{ik} = s_1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} \wedge j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - l_{sa})} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik} + j_{sa} - l - s + 1} \sum_{n_i = n + k}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{sa} - k_2 - j_{sa} - 1)} \frac{(n_i - 1)! (n_{sa} - 1)!}{(j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_i + j_{sa} - l - s + 1} \sum_{n_i = n + k}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(\cdot)} \sum_{(j_{ik}=j_{sa}^{ik}-j_{sa})}^{(\cdot)} \sum_{l_{ik}+j_{sa}^{ik}+1}^{(\cdot)} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\cdot)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$(D > n) \wedge n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOS1} = \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{(l_i+n+1 \leq l \leq D-s-1)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)} \sum_{(j_{sa}^{ik}-l-s+1)} \sum_{(j_{ik}-k_1+1)} \sum_{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{(n_{sa}=n-j_{sa}+1)} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

GÜLDÜZMÜNYA

$$\begin{aligned}
& \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa}^{ik} - l_{k_2})!} \cdot \\
& \frac{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \\
& \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})}^{(\quad)} \\
& \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} - j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{(n_i - j_{sa} - k_1 + 1)}^{n_{ik} + j_{ik} - j^{sa} - k_2} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_i - n_{ik} - k_1 - 1)!} \frac{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}{(n_{ik} - n_{sa} - k_2 - 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_i + j_{sa} - l - s + 1} j^{sa} = l_s + j_{sa} - l + 1 \\
 & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_i - n - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l_{sa} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 & \sum_{k=l}^{()} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})}^{l_s + j_{sa} - l} j^{sa} = l_i + n + j_{sa} - D - s \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)} \\
 & \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDENWA

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{sa}^{ik}}^{DOST} = \sum_{k=l}^{n+j_{sa}^{ik}-D-s+1} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}^{ik}-s+1} \sum_{j=l_i+n+j_{sa}-D-s}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

GÜLDÜZMÜNYA

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

GÜLDENWA

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz_{k_1, j_{sa}}^{DOST} = \sum_{k=l}^{\binom{D+j_{sa}-l-j_{sa}^{ik}+1}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}=j_{sa}+1}^{\binom{l_{ik}+j_{sa}-j_{sa}^{ik}+1}{j_{sa}^{ik}+1}} \sum_{n_i=n+k}^{\binom{n_i-j_{sa}-k_1+1}{n_{ik}=n+k_2-j_{ik}+1}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{n_{ik}+j_{ik}-j_{sa}-k_2}{n_{sa}=n-j_{sa}+1}} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{\binom{D+j_{sa}-l-j_{sa}^{ik}+1}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}=j_{sa}+1}^{\binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}^{ik}+1}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - \mathbb{k}_1) \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$

$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s = \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$

$s \geq l_s \wedge s = s + \mathbb{k}$

$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{D}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{s=0}^{\binom{D}{j_{sa}^{ik}=l_i+n+j_{sa}-D}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

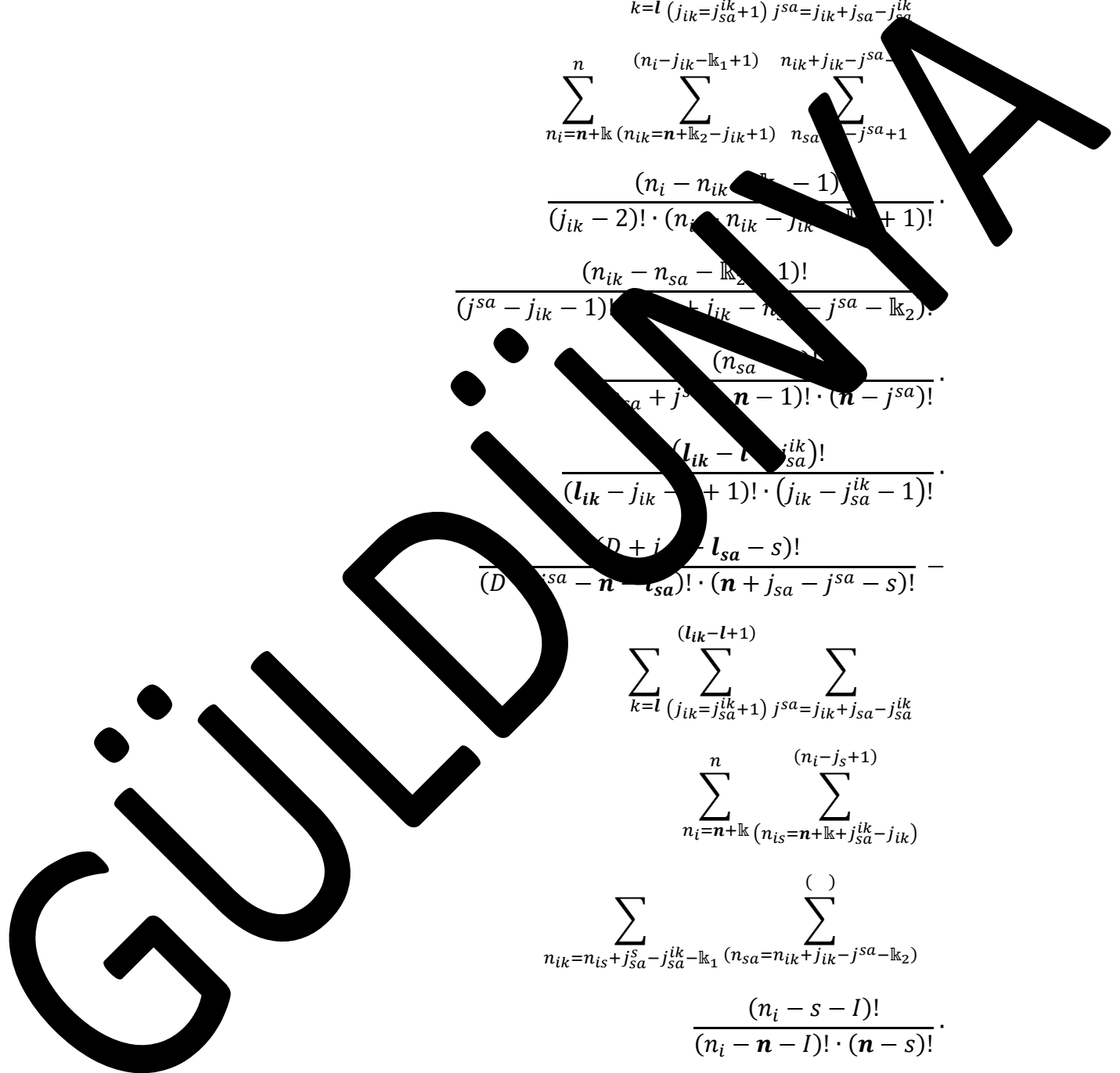
$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$



$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

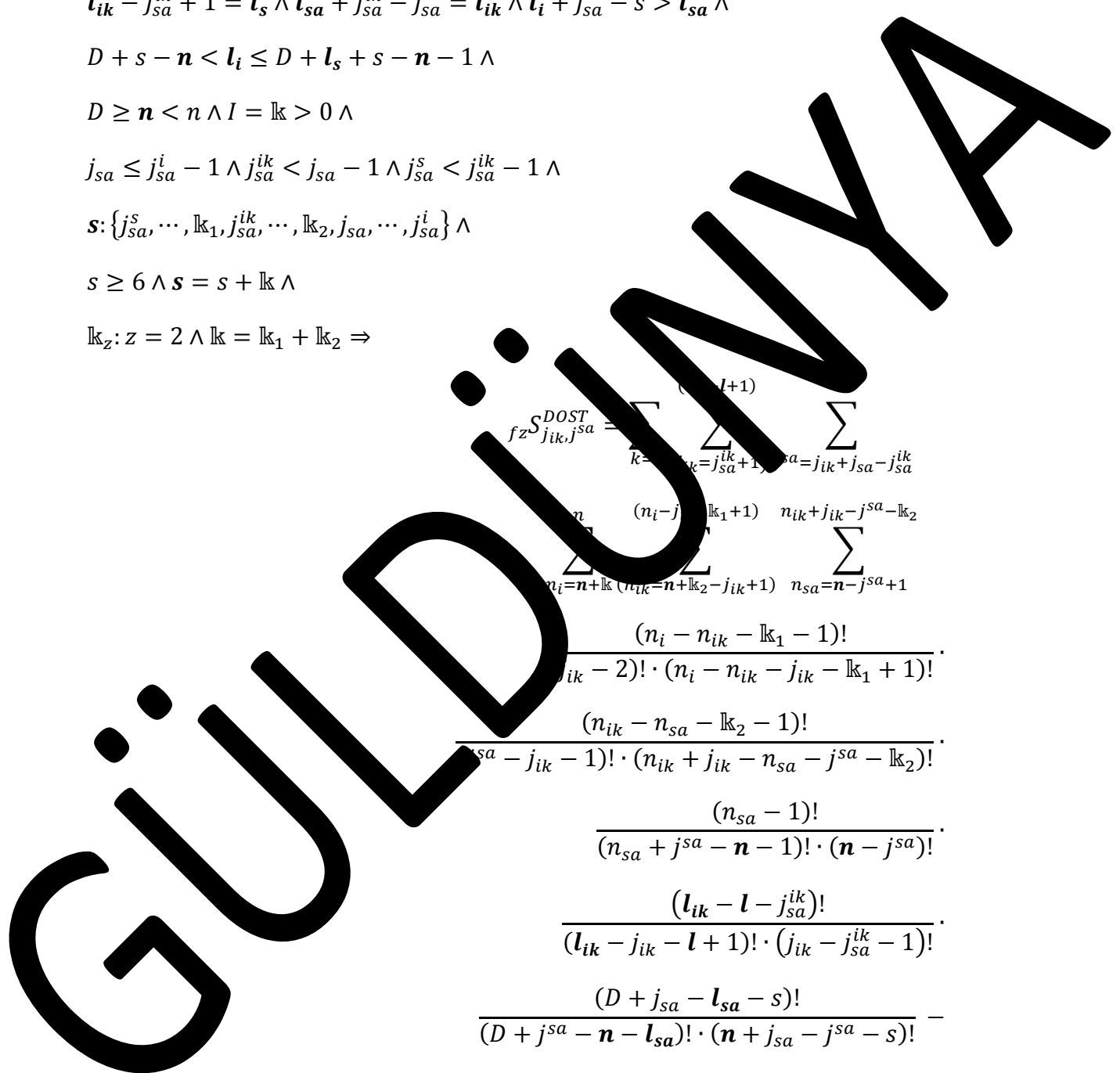
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(n_i-j_{sa}^{ik}-k_1+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{sa}-n+k_2-j_{ik}+1)} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i-s-1)!}{(n_i-n-\mathbb{k}_1) \cdot (n-s)!}$$

$$\frac{(l_s-l-1)!}{(l_s+j_{sa}^{ik}-j_{ik}-l)! \cdot (l_i-l-1)!}$$

$$\frac{(D-l_i)}{(D+j^{sa}+s-n-l_i-j_{sa})! \cdot (n-l_i-j^{sa}-s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i - j_{sa} - s > 0 \wedge$

$D + s - n < l_i \leq D + l_s - s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$

$s \geq 1 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z^{S_{j_{ik}, j_{sa}^{ik}}} = \sum_{k=l}^{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-l_{sa})} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{(j_{sa}^{ik}=j_{sa}-j_s+1)}$$

$$\sum_{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{(n_{is}=n+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{l=1}^{(j_{sa}^{ik} - j_{sa})} \sum_{\substack{n_i = n + \mathbb{k} \\ (n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}}^{(j_{sa}^{ik} - j_{sa})} \sum_{\substack{j_{sa} = j_{sa} + 1 \\ (n_{sa} = n - j_{sa} + 1)}}^{(j_{sa}^{ik} - j_{sa})} \sum_{\substack{n_{ik} = n_{ik} - \mathbb{k}_1 + 1 \\ (n_{sa} = n - j_{sa} - \mathbb{k}_2)}}^{(j_{sa}^{ik} - j_{sa})} \sum_{\substack{n_{sa} = n - j_{sa} + 1 \\ (n_{sa} = n - j_{sa} + 1)}}^{(j_{sa}^{ik} - j_{sa})} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{\substack{j_{ik} = j_{sa}^{ik} + 1 \\ (j_{ik} = j_{sa}^{ik} + 1)}}^{(l_{ik} - l + 1)} \sum_{\substack{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2 \\ (j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2)}}^{l_{sa} - l + 1} \sum_{\substack{n_i = n \\ (n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}}^n \sum_{\substack{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1 \\ (n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{\substack{n_{sa} = n - j_{sa} + 1 \\ (n_{sa} = n - j_{sa} + 1)}}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n_{sa} + j_{sa}^{ik} - j^{sa} - s)!} \cdot \sum_{k=l}^{n_{ik} + j_{sa}^{ik} - j_{sa}^{ik}} \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{n_{ik} + j_{sa}^{ik} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n - n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}+1}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik})} \frac{(l_s - l + 1)!}{(l_s + j_{sa}^{ik} - j_{sa}^{ik} - l)! \cdot (j_{sa}^{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(n_i - j_s + 1)!}{(n - l)! \cdot (n - s)!} \cdot \frac{(D - l)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1)$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n - l_i \leq D + l_s + s - n - 1)$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n - l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$l_{sa} \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 &\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
 &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 &\frac{(l_{sa} + j_{sa}^{ik})! \cdot (l_{ik} - j_{sa})!}{(l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1} \\
 &\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
 &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{is}=n+l-k)}^{(n_i+l+1)}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-k_1)}^{(\quad)} \sum_{(n_{ik}=n_{is}+j_{sa}-k_2)}^{(\quad)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_{sa} \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}^s=j_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}^{ik}-\mathbb{k}_2}^{n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2}$$

$$\frac{(n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}^{ik}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}^{ik}-n-1)! \cdot (n-j_{sa}^{ik})!}$$

$$\frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{sa}^{ik}-j_{sa}-l_{ik})! \cdot (j_{sa}^{ik}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}^{ik}-s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j_{sa}^s=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}^{ik}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}^{ik}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2})} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq l_i < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{\substack{l_{ik} = j_{sa}^{ik} + 1 \\ n_i = n + \mathbb{k}_1 \\ n_{sa} = n - j_{sa} + 1}} \sum_{\substack{l_{sa} = j_{sa} + 1 \\ n_{sa} = n - j_{sa} + 1}} \sum_{\substack{l_{ik} = j_{sa}^{ik} + 1 \\ n_{sa} = n - j_{sa} + 1}} \frac{(j_{sa} + l_{ik} - j_{sa}) l_{ik} + j_{sa} - \mathbb{k} + 1}{(n_{sa} - \mathbb{k}_1 - l_{sa} + 1) \dots (n_{sa} - \mathbb{k}_2 - l_{sa} + 1)} \cdot \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - \mathbb{k}_2 - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=0}^{n} \sum_{l_{ik}=j^{sa}+j_{sa}^{ik}}^{n} \sum_{j_{sa}^{ik}=j^{sa}+1}^{n} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik})} \sum_{j_{sa}^{sa+1}} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}^{sa}-\mathbb{k}_2)}^{(n_{sa}=n-j_{sa}^{sa}-\mathbb{k}_2)} \frac{(n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}^{sa}-\mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}^{sa}-n-1)! \cdot (n-j_{sa}^{sa})!} \cdot$$

$$\frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot$$

$$\left. \frac{(D+j_{sa}-l_{sa}-s)!}{(j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}^{sa}-s)!} \right) +$$

$$\left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j_{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j_{sa}^{sa+2}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}^{sa}-\mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}^{sa}-n-1)! \cdot (n-j_{sa}^{sa})!} \cdot$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}+1} \sum_{(j_{sa}+j_{sa}^{ik}-j_{sa}^{ik}+2)}^{l_{sa}+1} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_{ik}-l_{ik}+1)}^{(n_i-j_{ik}-l_{ik}+1)} \sum_{(n_{ik}+j_{ik}-l_{ik_2})}^{(n_{ik}+j_{ik}-l_{ik_2})} \\
 & \sum_{(n_{ik}-j_{ik}-l_{ik_1}+1)}^{(n_{ik}-j_{ik}-l_{ik_1}+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}=n-j^{sa}+1)} \\
 & \frac{(n_{ik}-j_{ik}-l_{ik_1}+1)!}{(j_{ik}-l_{ik_1}-1)! \cdot (n_{ik}-n_{ik}-j_{ik}-l_{ik_1}+1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{ik_2}-1)!}{(j^{sa}-l_{ik_2}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{ik_2})!} \cdot \\
 & \frac{(n_{sa}-1)!}{(j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(j^{sa}=j_{sa}+1)}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{ik_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{ik_2})}^{()}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$f_z S_{j_{sa}^{ik}}^{D_0} = \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa}^{ik} - n_{sa} - s)!}{(D + j_{sa}^{ik} - n_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \\
 & \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$\left((D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, i\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} z \overset{DOST}{j_{ik}, j_{sa}^{ik}} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n=n+l_k}^n \sum_{(n_{is} = n - j_{ik})}^{(n_i - l + 1)}$$

$$\sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - l_{k_1} - \dots - n_{ik} - j_{sa} - l_{k_2})} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = 1 \wedge l_s \leq D - n - 1 \wedge$$

$$2 \leq l \leq D - j_{sa} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_s \leq j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D - j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_{ik}, j_{sa}}^{DOST} = & \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\
& \left(\sum_{k=l}^{(j_{sa}+j_{sa}^{lk}-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{lk}+1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - l_{k_2} - j^{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} + j_{sa} - n - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik})! \cdot (l_{ik} - j_{sa})!}{(j_{ik} - l_{k_1} - j_{sa}^{ik} - 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} j^{sa}=l_i+n+j_{sa}-D-s$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{l_i=l}^{(l_{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \right. \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = i + j_{sa} - j_{sa}^{ik} \sum_{n=n+l+k}^n \sum_{(n_{is} = n - l - k)}^{(n_i - l - k + 1)} j_{ik} \sum_{(n_{ij} = n_{is} + j_{sa}^{ik} - k - k_1)}^{(n_i - l - k_1 - k_2)} j_{sa} - k_2 \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \frac{(j_{sa} - l - 1)!}{(j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(D - l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$j_{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq n + j_{sa}^{ik} - 1 \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n - l_{ik} \leq D - l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D > n - n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{s_{sa}^{i-1}, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik} j_{sa}^{sa}}^{DOST} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{sa}}^{n_{ik}+j_{ik}-j_{sa}^{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa}^{sa} - l_{k_2})!} \cdot \\
 &\frac{(n_i - j_{ik} - l_{k_1} - 1)!}{(n_i + j_{sa} - n - l_{k_1} - 1)! \cdot (n - j_{sa}^{sa} - l_{k_1} - 1)!} \cdot \\
 &\frac{(l_{ik} - j_{sa}^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{sa} - 1)!} \cdot \\
 &\frac{(D - j_{sa} - l_{sa} - s)!}{(D - j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa}^{sa} - s)!} \cdot \\
 &\sum_{k=l}^{(l_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^{sa}-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-l_{k_2})}^{(\quad)} \\
 &\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{(l_i+j_{sa}-l-s+1)}^{(\quad)} \sum_{(j_{sa}-D-s)}^{(\quad)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_{ik}-\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(l_s+j_{sa}-l)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = j_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1$$

$$\mathbb{k}_1 + z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n, n+k}^n \sum_{(n_{is} = \dots)}^{(n_i - s + 1)} \dots (j_{ik})$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1}^{(\dots)} \sum_{(n_{ik} = j_{sa} - k_2)} \dots \frac{(n_i - s - 1)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_{ik} + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$D \geq n < n \wedge l = l \wedge l_s \leq D - n - 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - j_{sa}^{ik} \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n - l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$

$D > n < n \wedge l = k > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\{j_{sa}^i, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$\begin{aligned}
f_z^S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_i+j_{sa}-l-s+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j_{sa}=l_{sa}+n-l}$$

$$\sum_{n_i=n+l}^n \sum_{(n_i \geq l)}^{(n_i+l-1)} \sum_{(n_i+l-1-j_{ik})}$$

$$\sum_{n_{ik}=n_i+j_{sa}-l_{sa}-l_{ik}}^{(\quad)} \sum_{(n_{ik} \geq j_{sa}-l_{k_2})}^{(\quad)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + \dots -$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - l_{sa} < l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D > \dots \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \rightarrow \dots \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i \}$$

$$s \geq 6 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_{ik} j_{sa}}^{DOST} = & \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa}^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa}^{sa} - l_{sa} - s)!}{(D + j_{sa}^{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa}^{sa} - s)!} + \\
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa}^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n_i - k)}^{(n_i - k + 1)} \sum_{j_{ik}}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1}^{(n_i - k_1 + 1)} \sum_{(j_{sa} - k_2)}^{(n_i - k_2 + 1)} \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_i \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l_i = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}^a=j_{sa}+1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-j_{ik}-\mathbb{k}_1+1)!}$$

$$\frac{(n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!}$$

$$\frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}^a=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{(\quad)}$$

$$\frac{(n_i-s-l)!}{(n_i-n-l)! \cdot (n-s)!}$$

$$\frac{(l_s-l-1)!}{(l_s+j_{sa}^{ik}-j_{ik}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

GÜLDÜŞÜMÜYA

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} f_{z,j_{sa}^{ST}} &= \sum_{k=l}^{n} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(n_i-j_{ik}-k_1+1)} \sum_{j_{sa}^{ik}=j_{sa}+1}^{l_{sa}-l+1} \\ &\sum_{i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\ &\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\ &\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(n_i-j_{ik}-k_1+1)} \sum_{j_{sa}^{ik}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_{ik} + j_{sa}^{ik} - n - 1) \wedge$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa} - n \leq l_{sa} \leq D - (l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i-1} \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\{s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 &\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 &\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 &\frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(j_{ik} - 1)!}{(n_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_{sa} - l - j_{sa} - s)!}{(D - j^{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 &\sum_{k=l}^{(l_s + j_s^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 &\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 &\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{(\quad)} \\
 &\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^k - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2$$

$$f_{z, k, j_{sa}}^{DST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}^{n} \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa}^{ik} = l + j_{sa} - l + 1}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{sa} = n + k - j_{sa} - k_2)}^{(n_{ik} + j_{sa} - j^{sa} - k_2)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - j_{sa} - k_1 - 1)! \cdot (n_i - n_{ik} - j_{sa} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - k_2 - 1)! \cdot (n_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

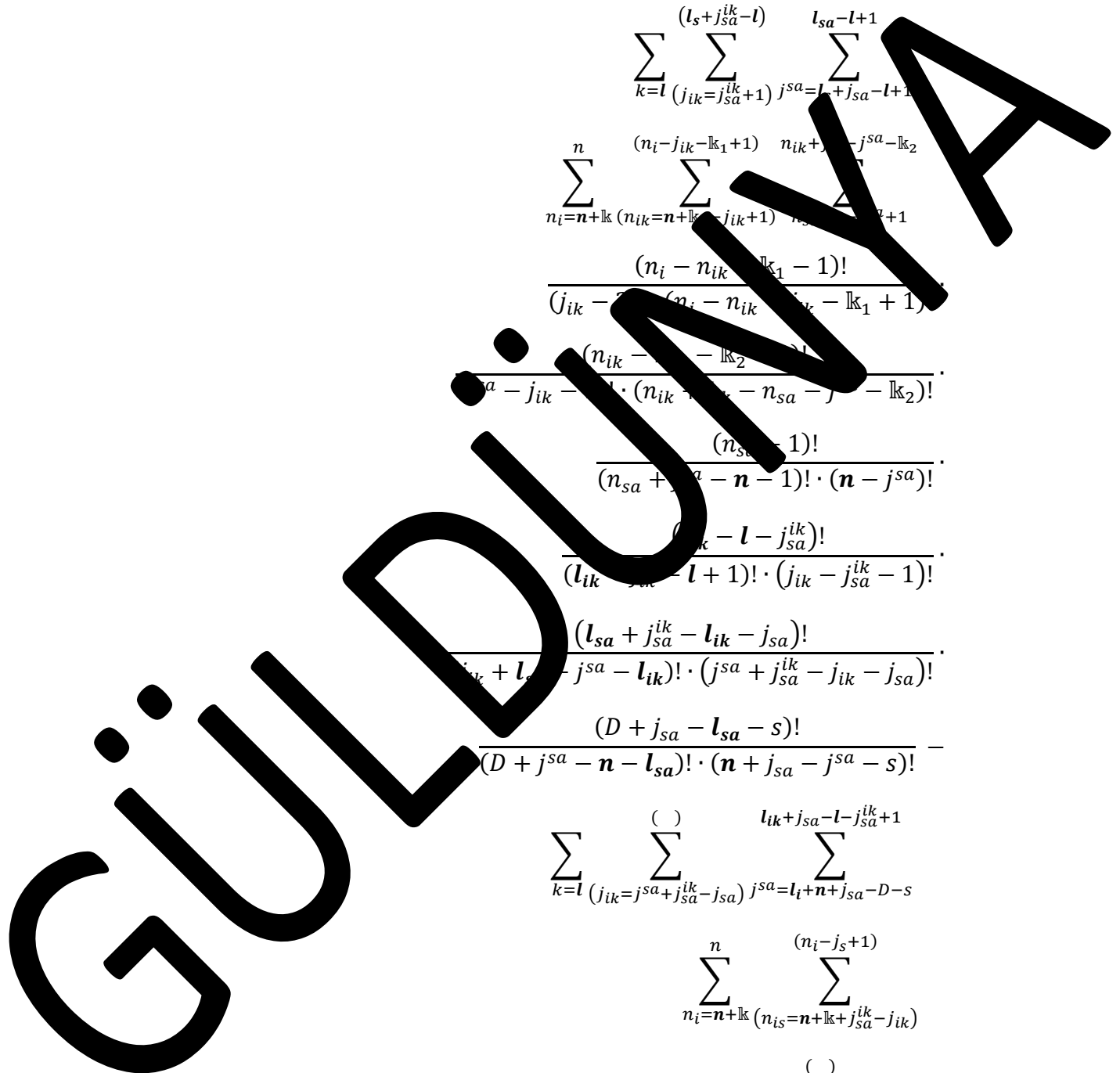
$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{()} \sum_{j_{sa}^{ik} = l_i + n + j_{sa} - D - s}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: (j_{sa}^s, \dots, k_1, j_{sa}^s, \dots, k_2, j_{sa}^s, \dots, j_{sa}^i)$$

$$s \geq 1 \wedge s = s + k \wedge$$

$$k_2: z = z + k = k_1 + k \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D}^{n} \sum_{(n_i - j_{ik} - k_1 + 1)}^{n_{ik} + j_{ik} - j^{sa} - k_2} \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_i - n_{ik} - k_1 - 1)!} \cdot (j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{k=l}^{(1+j_{sa}^{ik}-l)} \sum_{n_{sa}=l_{sa}+n+...-D-j_{sa}}^{l_{sa}-l+1} j^{sa-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_{ik}=n_{sa}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_2-1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - \mathbb{k}_1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

GÜLDEN

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{lk}-l_{k1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{lk})}^{()}$$

$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{lk} > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{ik} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \wedge (l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{i,j_{ik},j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1)} \sum_{l_{ik}=l_{ik}+n-D}^{(j_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1)} \sum_{n_{sa}=n-j_{sa}+1}^{(j_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_{ik}+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \frac{(n_i - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{sa}-l+1)} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa} - 1)!} \cdot \\
 & \frac{(n_i + j_{sa} - n - s)!}{(n_i + j^{sa} - n - s)! \cdot (n_i - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^n \sum_{(j_{sa}^{ik}-j_{sa})}^{(j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > \mathbb{k} \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 = \mathbb{k}_1 + 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{l=1}^{(l_{ik}-1)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-j_{sa}}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

GÜLDÜŞÜKA

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - (n_i - j_s + 1))}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1}^{(\dots)} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - k_2)}^{(\dots)}$$

$$\frac{(l_i - 1)! \cdot (n - l)! \cdot (n - s)!}{(l_s - l)! \cdot (j_{sa}^{ik} - 1)! \cdot (j_{sa}^{ik} - 1)!}$$

$$\frac{(D - 1)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - 1 < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - j_{sa} \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D + j_{sa}^{ik} - 1 < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$

$D - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

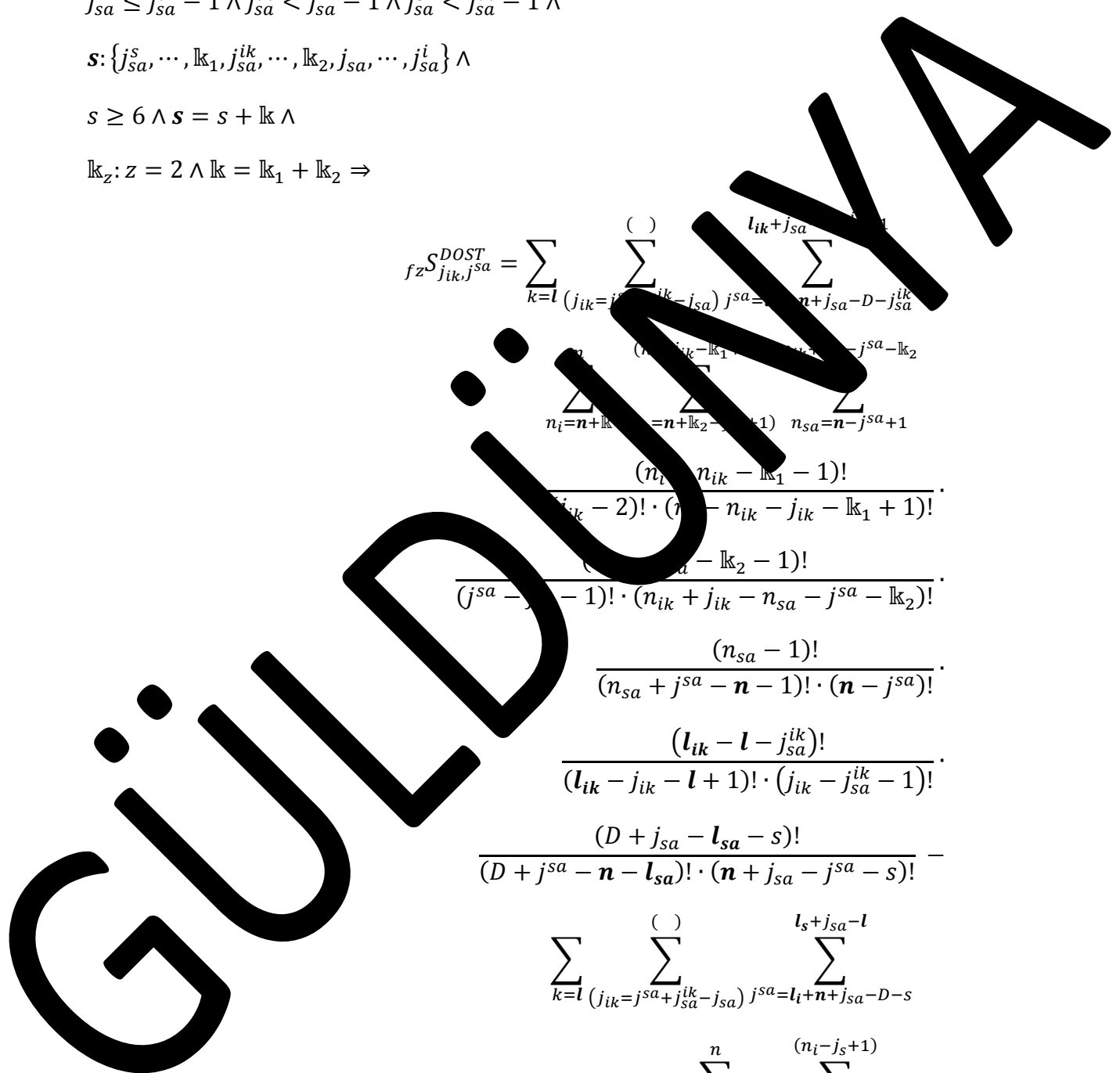
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{\substack{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa} \\ (n_{ik}=n+l-k_1-j_{sa}^{ik}-j_{sa} \\ n_i=n+k_1+j_{sa}^i-j_{sa}^{ik}-k_1-j_{sa} \\ n_{sa}=n+k_2-j_{sa}^{ik}-j_{sa} \\ n_{sa}=n-j_{sa}+1)}} \sum_{\substack{j_{sa}^{ik}=l_{ik}+j_{sa}-l \\ (n_{sa}=n+l-k_2-j_{sa}^{ik}-j_{sa} \\ n_{sa}=n-j_{sa}+1)}} \frac{(n_{ik} - k_1 - 1)!}{(n_{ik} - 2)! \cdot (n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{sa} - k_2 - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(\quad)} \sum_{\substack{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa} \\ (n_{ik}=n+l-k_1-j_{sa}^{ik}-j_{sa} \\ n_i=n+k_1+j_{sa}^i-j_{sa}^{ik}-k_1-j_{sa} \\ n_{sa}=n+k_2-j_{sa}^{ik}-j_{sa} \\ n_{sa}=n-j_{sa}+1)}} \sum_{\substack{j_{sa}^{ik}=l_s+j_{sa}-l \\ (n_{sa}=n+l-k_2-j_{sa}^{ik}-j_{sa} \\ n_{sa}=n-j_{sa}+1)}} \sum_{\substack{n_i=n+k_1 \\ (n_{is}=n+k_1+j_{sa}^{ik}-j_{ik})}} \sum_{\substack{n_{sa}=n_{ik}+j_{sa}^s-j_{sa}^{ik}-k_1 \\ (n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)}} \frac{(n_{ik} - k_1 - 1)!}{(n_{ik} - 2)! \cdot (n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{sa} - k_2 - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$



$$\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l = l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left(\sum_{k=1}^{\binom{D}{k}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \right) + \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\begin{aligned}
 & \left(\sum_{k=i}^n \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-i^{l+1}} \right. \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_i - 1)!}{(n - j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - j_{sa} - 1)!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=i}^n \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{j^{sa}=j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!} \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{zS}^{DOST}_{j_{ik}j_{sa}} = \left(\sum_{k=i}^n \sum_{l(j_{ik}=j_{sa}^{ik})} \binom{()}{l} l_{ik+j_{sa}-i} l_{-j_{sa}^{ik}} \sum_{j_{sa}=l_{sa}+n-D} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(j_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) +$$

$$\left(\sum_{k=i}^n \sum_{l(j_{ik}=j_{sa}^{ik})} \binom{()}{l} l_{sa-i}^{l+1} \sum_{j_{sa}=l_{sa}+n-D} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S j_{sa}^{ST} = \sum_{k=i}^n \sum_{l=1}^{(j_{sa} - j_{sa}^{ik})} \sum_{j_{sa}^{sa} = j_{sa}}^{l_{sa} - i^{l+1}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=i}^{(\cdot)} \sum_{l(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\cdot)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!} \cdot \frac{(D - l_{sa})!}{(D + s - l_{sa})! \cdot (n - s)!}$$

$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^{(\cdot)} \sum_{l(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\cdot)} \sum_{j^{sa}=j_{sa}}^{l_{sa}-i+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i^l}^{(\cdot)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{(\cdot)} \sum_{n_{sa}=n_i-j_{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1})!}{(n_i - n_{ik} - j_{ik} - l_{k_1} + 1)! \cdot (n - s)}$$

$$\frac{(D + s - n - l_i)!}{(n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = i^l > 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{l_{k_1}}, \dots, l_{k_2}, j_{sa}^{l_{k_2}}, \dots, j_{sa}^{l_{k_z}}\} \wedge$$

$$s \geq 6 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_z}: z = 2 \wedge l_{k_z} = l_{k_1} + 1 \Rightarrow$$

$$f_{z}^{S_{j_{ik}, j_{sa}^{ik}}} = \sum_{k=i^l}^{(\cdot)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\cdot)} \sum_{j_{sa}=j_{sa}^{ik}}^{l_{ik}+j_{sa}-i^l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=0}^{(j_{ik} - j_{sa}^{ik})} \sum_{j_{sa}^{ik} = k}^{(j_{ik} - j_{sa}^{ik})}$$

$$\sum_{n_i = n + \mathbb{k} - (n_{sa} - n_i - j_{ik} - \mathbb{k}_2 - 1)}^n \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n - \mathbb{k})! \cdot (n - s)!}{(n_i - n - \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{ik} - j_{sa} \wedge$$

$$j_{sa} + j_{sa} - j_{sa} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s - l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > \mathbb{k}_2 \wedge$$

$$j_{sa} \leq j_{sa}^i - j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \geq s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 \cdot 2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=i^l}^{(l_{sa} + j_{sa}^{ik} - i^l - j_{sa} + 1)} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{sa}=n-j^{sa}+1 \\ (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(j_{sa} - l - s)!}{(D + s - n - 1)! \cdot (n - s)!} \cdot \sum_{k=i}^{()} \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{() \\ (n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq l_i \wedge n \wedge l = l_i \wedge l_i \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa}^{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{sa} = l_{ik} \wedge$$

$$l_{sa} \wedge l_i \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$lk_z: z = 2 \wedge lk = lk_1 + lk_2 \Rightarrow$

$$fz S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{ik}-i+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{ik}=n+lk_2-j_{ik}+1)}^{(n_i-j_{ik}-lk_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-lk_2}$$

$$\frac{(n_i - n_{ik} - lk_1 - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - lk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!}$$

$$\frac{(n_{sa} - j^{sa} - lk_2 - 1)!}{(n_{sa} - n_{sa} - lk_2 - 1)! \cdot (n_{sa} - j^{sa})!}$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - j_{sa} - l_{sa} - s)!}{(D + i - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(\)} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{ik}=n_i-j_{ik}-lk_1+1)}^{(\)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-lk_2}$$

$$\frac{(n_i - s - lk)!}{(n_i - n - lk)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{sa}+j_{sa}^{ik}-i-l-j_{sa}+1)} \sum_{(j_{sa}^s=j_{sa}^{ik}-j_{sa})}^{(j_{sa}^s=j_{sa}^{ik}-j_{sa})} \sum_{(j_{sa}^s=j_{sa}^{ik}-j_{sa})}^{(j_{sa}^s=j_{sa}^{ik}-j_{sa})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_{ik}-1)}^{(n_i-j_{ik}-1)} \sum_{(n_{ik}+j_{ik}-j_{sa})}^{(n_{ik}+j_{ik}-j_{sa})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1)!}{(j_{ik} - i - 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - j_{ik} - \mathbb{k}_2 - 1)!}{(j_{sa}^s - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - i - l - j_{sa}^{ik})!}{(n_{ik} - j_{ik} - i - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{()} \sum_{j_{sa}^s=j_{sa}}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{()}$$

$$\frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l = i - l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2}$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^{l_{ik}-i^{l+1}} \sum_{(j_{ik}=j_{sa}^{ik})} l_{sa-i^{l+1}} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_{k_2}}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=0}^n \sum_{l=0}^k \sum_{j_{sa}^{ik}=j_{sa} - k_2}^{j_{sa}^{ik}=j_{sa} - k_1} \frac{(n_i - n_{ik} - k_1 - 1)!}{(n_i - n_{ik} - k_1)! \cdot (n - s)} \cdot \frac{(D + s - n - l)!}{(n - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq j_{ik} + j_{sa} - s$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{l_{sa}}, \dots, k_2, j_{sa}^s, \dots, j_{sa}^s\}$$

$$s \geq 0 \wedge s = s + k_1 \wedge$$

$$k_z: z = 2 \wedge k_z = k_1 + 1 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=0}^n \sum_{l=0}^k \sum_{j_{sa}^{ik}=j_{sa} - k_2}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa}^s=j_{sa}}^{n_i - j_{ik} - k_1 + 1} \frac{n_{ik} + j_{ik} - j_{sa} - k_2}{n_{sa} = n - j_{sa} + 1} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \right)$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\left(\sum_{k=i^l}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}+1}^{n_{ik} - j_{ik} - j^{sa} - \mathbb{k}_2} \right)$$

$$\sum_{n_i=n+\mathbb{k}_2}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik} - j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{sa} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

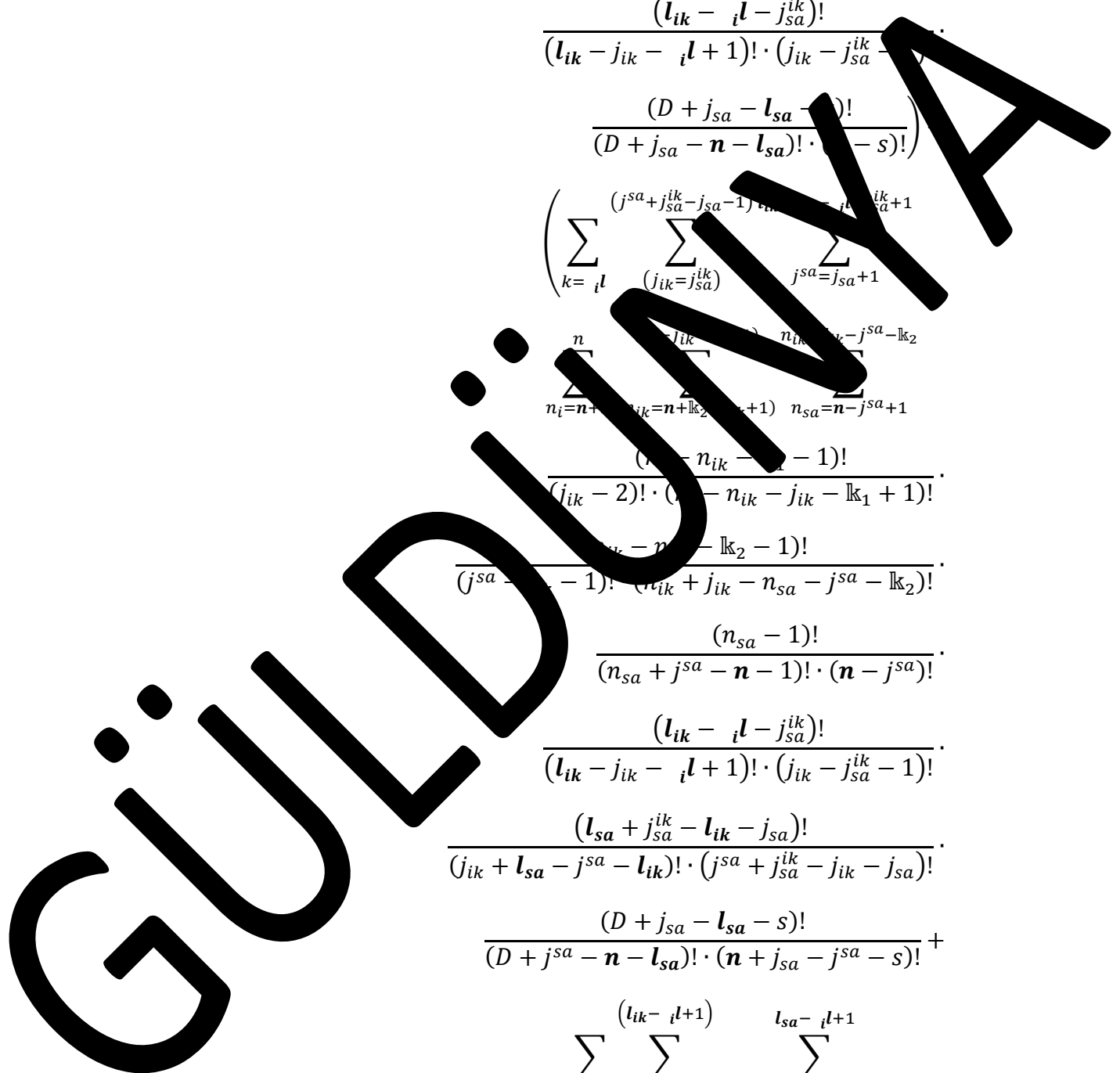
$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=i^l}^{(l_{ik} - i^{l+1})} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=l_{ik}+j_{sa} - i^l - j_{sa}^{ik} + 2}^{l_{sa} - i^{l+1}}$$

$$\sum_{n_i=n+\mathbb{k}_2}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_i - j_{ik} - \mathbb{k}_1 + 1) \cdot n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$



$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{\binom{D + j^{sa} - l_{sa} - j_{sa}^{ik}}{(D + j^{sa} - n - 1)! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa} - s)!}}{\sum_{k=1}^n \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=j_{sa}^{ik}} \binom{n}{n_i = n_{ik} + \mathbb{k}_1} \binom{(\cdot)}{(n_{ik} = n_{ik} - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq 6 \wedge n \wedge l = i^l \wedge l_{sa} \leq D - j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} - j_{sa}^{ik} + j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} - j_{sa}^{ik} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge$$

$$s \geq n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_{j_{ik}j^{sa}}^{DOST} = & \left(\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{ik}-i^{l+1})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n - s)!} \right) + \\
& \left(\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{ik}-i^{l+1})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-i^{l+1}} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=i}^l \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_{sa}=n_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - s - l_{k_1})!}{(n_i - n_{ik} - l_{k_1} - 1)! \cdot (n_i - s)!} \cdot \frac{(D - l_i)!}{(D + s - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - 1 > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + j_{sa} - n - l_{k_2} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^{sa} = j_{sa}^{ik} -$$

$$s \in \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, \dots, j_{sa}^i\} \wedge$$

$$s \geq l \wedge s = s + l_{k_2}$$

$$l_{k_2}: z = \dots \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=i}^l \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}-1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \right)$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\left(\sum_{k=i^l}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{ik} - i^l - j_{sa}^{ik} + 1} \sum_{j_{sa}=l_{sa}+n-D}^{n_{ik} - j_{ik} - j^{sa} - \mathbb{k}_2 + 1} \right)$$

$$\sum_{n_i=n+\mathbb{k}_2}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}-j_{sa}+1}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{sa} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=i^l}^{(l_{ik} - i^{l+1})} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa} - i^{l+1}} \sum_{j_{sa}=l_{ik}+j_{sa} - i^l - j_{sa}^{ik} + 2}^{l_{sa} - i^{l+1}}$$

$$\sum_{n_i=n+\mathbb{k}_2}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

GÜLDENWA

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D + j^{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n_{sa} + j_{sa}^{ik} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - l_i + j_{sa}^{ik} - j_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s - j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = l > 0 \wedge$$

$$j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^s, \dots, j_{sa}^{ik}\} \wedge$$

$$s \geq 6, s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa}^{ik} - 1 > l_s - s = l_s - s \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=1}^n \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{(n_i=n+\mathbb{k})} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \sum_{(n_{sa}=n-j^{sa}+1)} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \sum_{i=0}^{(l_{sa} - i l - s + 1)} \sum_{j_{ik}=l_i + n + j_{sa}^{ik} - D - s}^{(l_{sa} - i l - s + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(l_{sa} - i l - s + 1)}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = i_l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^{l_i+j_{sa}-l_i-s+1} \sum_{j=j_{sa}^{ik}}^{j_{sa}-1} \sum_{j_{sa}^{ik}-l_i+n+j_{sa}-D-s}^{j_{sa}-1} \frac{(n_i - j_{sa}^{ik} - k_1 + 1) \cdot (n_{ik} + j_{ik} - j_{sa} - k_2)}{(n_i - n_{ik} - k_1 - 1)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = i_l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^{(l_{ik} - i^{ik})} \sum_{l_i+n-D}^{l_i+j_{sa}-1} \sum_{j_{sa}+n+j_{sa}-D-s}^{j_{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i^{ik} - j_{sa})!}{(l_{ik} - j_{ik} - i^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^{\binom{D}{j_{ik}}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}^a=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}+\mathbb{k}_2+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-\mathbb{k}_2}^{n_{ik}+j_{ik}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik})!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 + 1)!}{(j_{sa}^{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=1}^{\binom{D}{j_{ik}}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}^a=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{\binom{D}{j_{ik}}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - s - \mathbb{k})!}{(n_i - n - \mathbb{k})! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = \mathbb{k} \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^{\mathbb{k}} \sum_{i=1}^{\mathbb{k}} \sum_{j_{sa}^{ik}}^{j_{sa}^i} \sum_{j_{sa}^s}^{j_{sa}^{ik}} \frac{(n_{ik} - j_{sa} - \mathbb{k}_2)!}{(n_{ik} - j_{sa} - \mathbb{k}_2 - 1)!} \cdot \frac{(n_{ik} - j_{sa} - \mathbb{k}_2 - 1)!}{(n_{ik} - j_{sa} - \mathbb{k}_2 - 1)!} \cdot \frac{(n_{sa} - j_{sa} + 1)!}{(n_{sa} - j_{sa} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l = \mathbb{k} \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^i \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = \mathbb{k} \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^i \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{k=i}^n \sum_{l(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=0}^n \sum_{l=0}^{(n-k)} \sum_{j_{sa}=j_{sa}^{(k,l)}} (j_{ik}=j_{sa}^{(k,l)})$$

$$\sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{(n_i-l)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}}^{(n_i-l)}$$

$$\frac{(n_i - s - k)!}{(n_i - n - k)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - l)! \cdot (n - s)!}$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=i}^n \sum_{l=1}^{()} \sum_{j_{sa}=l_{sa}+n-1}^{l_{sa}-l+1} \dots$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_{ik}-k_1+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{ik}+1-j_{sa}-k_2} \dots$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \dots$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(n_{ik} - j_{ik} - n_{sa} - k_2)!} \dots$$

$$\frac{(n_{sa} - n_{sa} - n - 1)! \cdot (n - j_{sa})!}{(l_{sa} - j_{sa}^{ik} - l_{ik} - j_{sa})!} \dots$$

$$\frac{(l_{sa} - j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}{(D + j_{sa} - l_{sa} - s)!} \dots$$

$$\frac{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n) \wedge l = l_s \wedge l_s \leq D - n + 1) \vee$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$(D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n) \wedge l = l_s \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa} - j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{j_{ik}, j_{sa}}^{S_{DOST}} = \sum_{k=i}^n \sum_{l=j_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l=j_{sa}+j_{sa}^{ik}-i-l-j_{sa}+1} \sum_{j_{sa}^{ik}-j_{sa}}^{j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}^{ik}-j_{sa}}^{j_{sa}^{ik}-j_{sa}} \sum_{n_i=n+\mathbb{k}_1}^n \sum_{j_{ik}=j_{sa}+1}^{(n_i-j_{ik}-1)} \sum_{n_{ik}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i-n_{ik}-\mathbb{k}_1)!}{(j_{ik}-1)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \frac{(n_{ik}-j_{ik}-\mathbb{k}_2-1)!}{(j_{sa}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-i-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-i-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$((D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} + j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOST} S_{j_{ik}, j_{sa}}^{j_{sa}^{ik}} = \sum_{k=i}^{n} \sum_{l=j_{sa}^{ik}}^{j_{sa}^{ik} + j_{sa} - k} \sum_{j_{sa}^{ik} = l - j_{sa}^{ik} + 1}^{l - j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{ik} = n_{sa} - j_{ik} + 1}^{n_i - j_{ik} - \mathbb{k}_1} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n) \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} = j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa}^{ik} > l_{ik} - l_i + j_{sa} - j_{sa}^{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$D \geq n < n \wedge l = i \wedge l_s > 0 \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^{ik} - j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{ik}, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^{ik}, \dots, j_{sa}^{ik}\} \wedge$$

$$s \geq 6, \mathbb{k}_1 = s + \mathbb{k}_2 \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k}_1 = \mathbb{k}_2 + 1 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{ik}}} = \sum_{k=i}^{l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-i+1)} \sum_{(j_{sa}^{ik}=l_{sa}+n-D)}^{l_{sa}-i+1}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}$$

$$l_{sa} > D + l_s + j_{sa} - n - 1) \wedge$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} > D + l_{ik} + j_{sa} - (j_{sa}^{ik} - j_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > l_s \wedge$$

$$j_{sa}^{ik} - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_s, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$j_{sa}^s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} - l_{sa} - j_{sa} - j_{sa}^{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik} - 1)! \cdot (j^{sa} + j_{sa}^{sa} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!}$$

$$\left((D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s - l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge$$

$$l_{sa} > D + l_s - j_{sa} - n - 1) \vee$$

$$(D < n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{ik} + 1 > l_s \wedge$$

$$l_{sa} > D + j_{ik} + j_{sa} - n - j_{sa}^{ik})) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{(l_{ik}-i+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-i+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!}$$

$$\frac{(n_{sa} - j^{sa} - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n_{sa} - j^{sa})!}$$

$$\frac{(l_{sa} - j_{sa}^{ik} - l_{sa} - j_{sa})!}{(j_{ik} - l_{sa} - j^{sa} - 1)! \cdot (j^{sa} - j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l = i \wedge l_s = D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa} - j_{sa}^{ik} - l_{ik} \wedge$

$l_{sa} > (l_{sa} + l_s + j_{sa} - n - 1) \vee$

$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{sa} - j_{sa}^{ik} + 1 > l_s \wedge$

$l_{sa} > D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-i+1)} \sum_{j_{sa}=l_{sa}+n-k}^{l_{sa}-i+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{(n_{sa}=n-k_2-j_{sa}+1)}^{n_{ik}+j_{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - j_{sa} - k_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - k_2)!} \cdot \frac{(n_{sa} - j_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i - j_{sa}^i)!}{(l_{ik} - i + 1)! \cdot (j_{ik} - j_{sa}^i - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

GÜLDÜZMAYA

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{zS}^{D}_{j_{ik}, j_{sa}} = \left(\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\binom{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}{n_{sa}=n-j^{sa}+1}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left(\sum_{k=l}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \right)$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_{sa} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik} - j_{sa}^{ik} + j_{sa}^{ik} - l_{sa} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

GÜLDÜŞMÜŞA

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(l_{ik}+j_{sa}^{ik}-j_{sa}^{ik}+1)}^{()} \sum_{(l+n+j_{sa}^{ik}-D-s)}^{()} \sum_{(n+l_k)}^{(n-j_s^{ik}+1)} \sum_{(n+l_k)}^{(n+l_k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1})}^{(n_{ik}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_{sa} > D - n + 1 \wedge l_{sa} > D - n + 1 \wedge \\ & D + l_{sa} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee \\ & (l_{sa} > n \wedge l_s > D - n + 1 \wedge \end{aligned}$$

$$\begin{aligned} & D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \end{aligned}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{S_{j_{ik} j_{sa}^{DOST}}} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{sa}^{l+1}}^{(n-D)} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k+j_{sa}^{ik}-j_{ik}}^{(n_i-k_1+1)} \sum_{j_{sa}^{ik}=j_{sa}+1}^{(n_{is}-j_{ik}+1)} \frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_{is}-n_{ik}-j_{ik}+1)!} \cdot \frac{(n_{ik})}{(j_{sa}^{sa}-1)!} \frac{(n_{sa}-1)!}{(n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_i) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \wedge$

$D \geq n < n \wedge l = \mathbb{k}_1 = 0 \wedge$

$l_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s - \mathbb{k}_1, j_{sa}^{ik} - j_{sa} - 1, j_{sa}^i\} \wedge$

$s \geq 4 \wedge s \leq s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2, \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - s)!} + \right. \\
 & \left. \left(\sum_{k=l}^n \sum_{\substack{j_{ik}+n-j^{sa}-l_{sa}-1 \\ (j_{ik}+n-D)}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right) \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right)
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}+1)}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
 & \frac{(l_{ik} - j_{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot \\
 & \left(\frac{(D + j_{sa} - n_{sa} - s)!}{(D + j_{sa} - n_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_i-j_s+1)} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDEN

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l}^n \binom{n}{j_{ik} + j_{sa}^{ik} - l} \binom{n - j_{sa} - l}{j_{sa} = l_{sa} + n - D} \sum_{n_i = n + k}^n \binom{n_i - j_{ik} - k_1 + 1}{n_{ik} + j_{ik} - j^{sa} - k_2} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} - n + k_2 - j_{ik} + 1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_s + j_{sa} - l} \sum_{j_{sa} = l_{sa} + n - D} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s+l)-1} \sum_{\substack{j_{ik}=s+n+j_{sa}^{ik}-D-1 \\ j^{sa}=l_s+j_{sa}-l+1}}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +
 \end{aligned}$$

GÜLDENKA

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - n - s)!}{(D + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z^s}^{DOST} = \sum_{k=l}^{(l_s - j_{sa}^{ik} - l)} \sum_{(j_{ik} = n + j_{sa}^{ik} - D + l)}^{(l_s - j_{sa}^{ik} - l)} \sum_{j_{sa} = l_{sa} + n - D}^{l_{sa} - l + 1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - (n_i - j_s + 1))}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(\cdot)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{(\cdot)}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n_i - s)!}$$

$$\frac{(l_s - l)!}{(l_s + j_{sa} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa} - 1)!}$$

$$\frac{(D - 1)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - j_{sa} - 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - k_1 + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} >$$

$$D \geq n < n \wedge k_1, k_2 \geq 0$$

$$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 1, s = s + 1$$

$$k_z: z = 2, k_z = k_1 + k_2 \Rightarrow$$

$$f_z^{SDOST}_{j_{ik}, j^{sa}} = \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \right.$$

$$\left. \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \right)$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j_{sa} - l_{sa})!} + \left(\sum_{l=1}^{l_{sa} - l + 1} \sum_{j_{ik}=l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{l_{sa} - l + 1} \sum_{j_{sa}^{ik}=j_{sa}^{ik} - D - l}^{l_{sa} - l + 1} \sum_{n_i=n+l_k}^n \sum_{n_{ik}=n_{sa} - j_{ik} + 1}^{n_i - j_{ik} - l_{sa} - l} \sum_{n_{sa}=n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{sa} - l} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=l} \sum_{j_{ik}=l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{(l_{sa} + j_{sa}^{ik} - l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik} - D - j_{sa}}^{l_{sa} - l + 1} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik} + 1}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \left(\frac{(D - j_{sa} - l_{sa} - s)!}{(n + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s+j_s-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{\binom{D+j_{sa}-l_{sa}-s}{j_{ik}+j_{sa}-j_{sa}^{ik}-j_{sa}}} \sum_{\substack{n_i=n+\mathbb{k}_1 \\ n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}}^{\binom{l_{ik}+j_{sa}-l_{sa}-\mathbb{k}_1}{n_{ik}+j_{sa}^{ik}-j_{sa}}} \sum_{\substack{n_{sa}=l_{sa}+n-D \\ n_{sa}=n_{is}+j_{sa}^{ik}-j_{sa}}}^{\binom{l_{sa}+j_{sa}-l_{sa}-\mathbb{k}_2}{n_{sa}+j_{sa}^{ik}-j_{sa}}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{D+j_{sa}-l_{sa}-s}{j_{ik}+j_{sa}-j_{sa}^{ik}-j_{sa}}} \sum_{\substack{n_i=n+\mathbb{k} \\ n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik}}}^{\binom{l_s+j_{sa}-l}{n_i-j_s+1}} \sum_{\substack{n_{sa}=l_i+n+j_{sa}-D-s \\ n_{sa}=n_{is}+j_{sa}^{ik}-j_{ik}}}^{\binom{n_i-j_s+1}{n_{sa}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik}}}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{DOST} = \sum_{\mathbb{k}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{(l_{sa}=l+1)} \sum_{(n_i=n+\mathbb{k})} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \sum_{(n_{sa}=n-j^{sa}+1)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}} \sum_{\binom{()}{l_s+j_{sa}-l}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k+j_{sa}^{lk}-j_{sa}^{ik}}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{lk_2}}}$$

$$\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n_i - s)!}$$

$$\frac{(l_s - l + 1)!}{(l_s + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{sa} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - s)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{lk} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} \leq n - j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{lk} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa}^{ik} = l_{ik} \wedge$

$D \geq n < n \wedge l = l_{k_1} = 0 \wedge$

$j_{sa}^s \leq j_{sa}^i - 1, j_{sa}^{lk} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{lk} - 1 \wedge$

$s: \{j_{sa}^i - l_{k_1}, j_{sa}^{lk}, l_{k_2}, j_{sa}^i - j_{sa}^i, j_{sa}^i\}$

$\geq 4 \wedge s = s + l_k \wedge$

$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_2} \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa}}} \sum_{\binom{()}{l_{ik}-l+1}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{ik}=n+l_{k_2}-j_{ik}+1}} \sum_{\binom{()}{n_{sa}=n-j_{sa}+1}} \sum_{\binom{()}{n_{ik}+j_{ik}-j_{sa}-l_{k_2}}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})} \sum_{(n_{is} + j_{sa}^s - j_{sa}^{ik} = \mathbb{k}_1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n - n \wedge l_s > D - 1 + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} - j^{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n - n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_{ik} j^{sa}}^{DOST} &= \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 &\frac{(n_i - n_{ik} - \dots)}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - \dots + 1)!} \\
 &\frac{(n_{ik} - \dots - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - \dots)!} \\
 &\frac{(n_{sa} - \dots)!}{(n_{sa} - j^{sa} - \dots - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_{ik} - \dots - l + 1) \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(D + j_{sa} - \dots) \cdot (l_{sa} - s)!} \\
 &\frac{(D + j_{sa} - \dots) \cdot (n - l_{sa})}{(D + j_{sa} - \dots) \cdot (n + j_{sa} - j^{sa} - s)!} \\
 &\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 &\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_i - j_s + 1)} \\
 &\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 &\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{(l_s + j_{sa} - l)} \sum_{(j_{sa} = n - D - s)}^{(l_s + j_{sa} - l)} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n - \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - j_{sa} + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(n_i - j_{ik} - j_{sa} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = l_s + j_{sa} - l + 1}^{l_i + j_{sa} - l - s + 1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=1}^l \sum_{\substack{(n_{ik} - j_{sa}^{ik} + j_{sa}^{ik} - j_{sa}) \\ (n_{ik} - j_{sa}^{ik} + j_{sa}^{ik} - j_{sa})}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-s+1} j_{sa}=l_i+n+j_{sa}^{ik}-s$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} j_{sa}+1$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} j_{sa}+1$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

GÜLDÜŞMÜŞA

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa})!} \cdot \sum_{k=l_{sa}+n}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=n+k}^{(n_{sa}-j_{sa}^{ik})} \sum_{j_{sa}^{ik}=n+k}^{(n_i-j_s+1)} \sum_{j_{sa}^{ik}=n+k}^{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})} \sum_{k_1=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-k_1}^{()} \sum_{k_2=n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}^{()} \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned} & ((D - j_{sa}^{ik} < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \end{aligned}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{zj_{ik}^{sa}}^{ST} = \sum_{k=l}^{()} \sum_{(j_{ik} = j_{sa}^{ik} + j_{sa}^{ik} - j_{sa})} \sum_{j^{sa} = l_{sa} + n - D}^{l_{sa} - l + 1} \sum_{n+l_k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik} = j_{sa}^{ik} + j_{sa}^{ik} - j_{sa})} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_s + j_{sa} - l}$$

GÜLDÜNYA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 &\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} + j^{sa})!} \cdot \\
 &\frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_{ik} - j_{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 &\sum_{k=l}^{(l_s + j_s^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 &\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 &\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{(\quad)} \\
 &\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz \sum_{k=l}^{DOST} j_{ik} j_{sa}^{ik} = \sum_{k=l}^{(j_{sa} - l - j_{sa}^{ik} + 1)} \sum_{j_{sa} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{(j_{sa} - l - j_{sa}^{ik} + 1)} \sum_{j_{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}}^{(j_{sa} - l - j_{sa}^{ik} + 1)}$$

$$\sum_{n+k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{l_s + j_{sa} - l}^{j_{sa} = l_i + n + j_{sa} - D - s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{sa}^{ik} \wedge l_i + j_{sa} - s > l_s) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{sa}^{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

$$j_{sa}^s \leq j_{sa}^{l-1} \wedge j_{sa}^{ik} = j_{sa}^{l-1} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^{l-1}, j_{sa}^{ik}, j_{sa}^{l-1} - 1, j_{sa}^s\} \wedge$$

$$s \geq 4 \wedge s \leq n + \mathbb{k} \wedge$$

$$z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{DOST}}} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_s - l - j_{sa} - s)!}{(l_s + j_{sa}^{ik} - n - 1)! \cdot (n - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{(l_s + j_{sa}^{ik})} \sum_{\substack{(j_{ik}=l_i+n_{sa}^{ik}-D-s) \\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}} \sum_{\substack{n \\ n_i=n+\mathbb{k} \\ (n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\substack{(\) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \\
& \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$(n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=0}^n \sum_{l_{ik}=n-k}^n \sum_{l_{sa}=l_i+n+j_{sa}-D-s}^n \sum_{n_{ik}=k}^n \sum_{n_{sa}=n-j_{sa}+1}^n \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=l}^n \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_i+j_{sa}-l-s+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{ik} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{j_{sa}^{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(n)} \sum_{j^{sa} = l_{sa} + n - D}^{l_s + j_{sa} - l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(n)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n)} \\
 & \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$\begin{aligned}
 & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\
 & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge
 \end{aligned}$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}^{sa}}^{DOCT} = \sum_{k=l}^{(n_i + j_{sa}^{ik} - D - 1)} \sum_{(j_{ik} = l_{ik} - D)} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{l_i + j_{sa} - l - s + 1} \frac{(n_i - j_{ik} - k_1 + 1)}{\sum_{i=n+k}^{(n_{ik} = n + k_2 - j_{ik} + 1)}} \frac{n_{ik} + j_{ik} - j_{sa} - k_2}{\sum_{n_{sa} = n - j_{sa} + 1}} \cdot \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n-j_{sa}^{ik})}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDENWA

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$(D \geq n < n \wedge l_s = l_k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, l_{sa}^{ik}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = j_{sa} - l_{k_2} \wedge$$

$$l_{k_2} = j_{sa} - l_{k_1} \wedge l_{k_1} = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}}$$

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik})} \sum_{j_{ik} = j^{sa} + n - D}^{(l_{sa} - j_{sa}^{ik} + n - D)} j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2 \\
 & \sum_{n_i = n + j_{sa}^{ik} - l_{ik} - j_{sa} + 1}^n \sum_{n_{sa} = n - j^{sa} + 1}^{(n_i - j_{sa}^{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{()} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_s + j_{sa} - l}
 \end{aligned}$$

GUIDANCE

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$$\left((D \geq n < n \wedge l_s > D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \left. \right) \vee$$

$$\left((D \geq n < n \wedge l_s > D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \left. \right) \vee$$

$$\left((D \geq n < n \wedge l_s > D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \left. \right) \vee$$

$$\left((D \geq n < n \wedge l_s > D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \left. \right) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}^{sa}+n-D}^{l_{sa}-l+1} \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \\ \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j_{sa}^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa}^{ik} = l_i + n + j_{sa}^{ik} - D - j_{sa}^{ik}}^{j_{sa}^{ik} - 1} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{j_{sa}^{ik} - 1} \sum_{n_{is} = n + k + j_{sa}^{ik} - j_{ik}}^{j_{sa}^{ik} - 1} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}^{()} \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n \wedge l_s > D - l_i + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} - j_{sa}^{ik} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{(\quad)}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa} = l_s + n + j_{sa} - D - 1$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \dots)}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - \dots + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - 1)!}$$

$$\frac{(n_{sa} - \dots)!}{(n_{sa} - j^{sa} - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{sa} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{l} \sum_{\binom{(\quad)}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{l_{sa}-l+1}^{l_{sa}-l+1} j^{sa} = l_i + n + j_{sa} - D - s$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1}^n \sum_{\binom{(n_i-j_s+1)}{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + j_{sa}^{ik} - D - s)}^{(j_{sa}^{ik} - D - s)} \sum_{(j_{sa} = j_{sa} - j_{sa}^{ik})}^{(j_{sa} - j_{sa}^{ik})}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - j_{sa} + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - j_{ik} - j_{sa} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

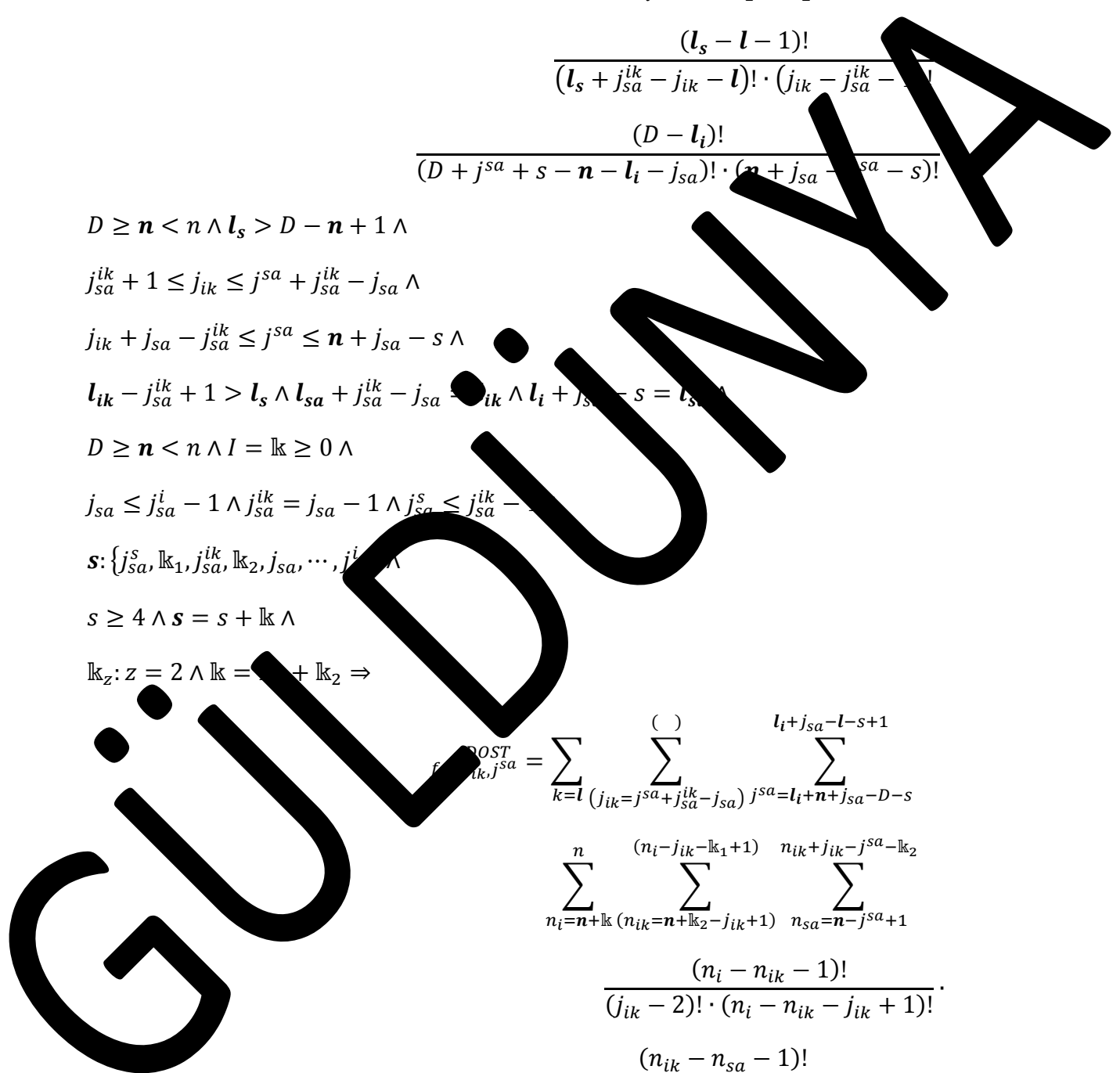
$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} -$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{ik, j^{sa}}^{POST} = \sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_i+j_{sa}-l-s+1}^{j^{sa}=l_i+n+j_{sa}-D-s} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$



$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{\binom{)}{}} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(n_i+1)} \sum_{(n_i=n+k)}^{\binom{)}{}} \sum_{(n_i=n+k)}^{\binom{)}{}} \frac{(n - s - k_1 - k_2)!}{(n - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s \geq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - j_{sa}^{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq l \wedge$$

$$j_{sa}^{ik} - 1 \wedge j_{sa} - j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^s, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$j_{sa}^s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{\binom{)}{}} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_i+j_{sa}^{ik}-l-s+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\binom{)}{}}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_s - l - j_{sa} - s)!}{(l_s + j_{sa} - n - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{(l_s+l)} \sum_{(j_{ik}=j_{ik}+n-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
& \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$(n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{DOST} = \sum_{k=l}^n \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j_{sa}+j_{sa}^{ik}-1} \sum_{j_{sa}=l_{sa}+n-D}^{j_{sa}-l} \frac{(n_i - k_1 + 1) \cdot (n_{ik} + j_{ik} - j_{sa} - k_2)}{(n_i - n_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^n \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - 1)! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{\binom{D-l}{j_{ik}+j_{sa}-j_{sa}}} \sum_{\substack{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1 \\ j^{sa}=l_i+n+j_{sa}-D-s}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{\binom{D-l}{j_{ik}+j_{sa}-j_{sa}}} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{j_{ik}=l_s}^{(l_{sa} + j_{sa}^{ik} - D - j_{sa})} \sum_{j_{sa}^{ik}=j_{sa} - D - 1}^{l_{sa} - l + 1} \sum_{j_{sa}^{ik}=l_{sa} + n - D}^{l_{sa} - l + 1} \sum_{n_{ik}=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_i - n_{sa} - 1)!}{(n_i + j^{sa} - n_{sa} - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
& \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \\
& \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOS} = \sum_{j_{ik}=j_{sa}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}^{ik}=j_{sa}+1}^{l_s+j_{sa}-l} \sum_{n_i=n+k}^{(n_i-j_{ik}+k_1+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j_{sa}-1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} j^{sa} = l_s + j_{sa} - l + 1 \\
& \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n - n_{sa} - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{()} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})}^{l_s + j_{sa} - l} j^{sa} = j_{sa} + 1 \\
& \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)} \\
& \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z, j_{sa}^{ik}}^{DOST} = \left(\sum_{k=l}^n \sum_{j_{sa}^{ik}=j_{sa}+j_{sa}^{ik}} \sum_{j_{sa}^{ik}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \frac{(n_i - j_{ik} - \mathbb{k}_1 + 1) \cdot (n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}{n_i + \mathbb{k} (n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1) \cdot n_{sa} = n - j_{sa} + 1} \cdot \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \left(\sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa}^{ik} = j_{sa} + 2} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik})} \sum_{j_{sa}^{ik}=j_{sa}+1}^{l_{sa}} j_{sa}^{ik} \cdot j^{sa-l-j_{sa}^{ik}+2} \\
 & \sum_{n_i=n+l_{sa}+k_1+l_{sa}+k_2-j_{ik}+1}^n (n_i - j_{sa}^{ik} - k_1 + 1) \cdot \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{sa}+1}
 \end{aligned}$$

GUIDANCE

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{lk}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - 1 = l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{lk} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{lk}, \dots, j_{sa}, \dots, j_{sa}^{ik}\} \wedge$$

$$s \geq 1 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}^{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - l) \cdot l_{sa} - l} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{j^{sa} = j_{sa}^{ik}} \right)$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_{ik} = n + \mathbb{k}_2 - j^{sa} - \mathbb{k}_2)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{sa} = n - j^{sa} + 1}$$

$$\frac{(n_i - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

GÜLDÜSMEYİ

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - n_{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j^{sa} - l_{sa} - j_{sa}^{ik})!}{(D + j^{sa} - n - l_{sa} - j_{sa}^{ik} - s)!} \cdot \sum_{k=0}^{j_{sa}^{ik}-l} \sum_{\substack{l_{ik}=j_{sa}^{ik}+1 \\ l_{sa}^{ik}=j_{sa}^{ik}-k}} \sum_{a=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$n \geq n < n \wedge l \neq i \wedge l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(n_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \right)$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}, \dots, j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_i-j_s)} \sum_{(n+l_k)} \sum_{(n_{i_s}+l_k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{ik}=n_{i_s}+j_{sa}^{ik}-l_{k_1}, \dots, n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_{sa} \leq l \wedge l_s \leq D - n - l \wedge$$

$$j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{ik} + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$n \geq n \wedge I = l_k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + l_k \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z^{S_{j_{ik}, j^{sa}}} = \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \right.$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{l_{sa} - l + 1} \right.$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

GÜLDENYA

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{j_{sa}^{ik}} \sum_{(j_{sa} = j_{sa}^{ik} + j_{sa} - j_{sa}^{ik})}^{j_{sa}^{ik}}$$

$$\sum_{n=n+l}^n \sum_{(n_{is} = n_{is} + 1)}^{(n_{is} + 1)} \sum_{(j_{ik})}^{(j_{ik})}$$

$$\sum_{(n_{ij} = n_{is} + j_{sa}^{ik} - k_1)}^{(n_{ij} = n_{is} + j_{sa}^{ik} - k_1)} \sum_{(j_{sa} = j_{sa}^{ik} - k_2)}^{(j_{sa} = j_{sa}^{ik} - k_2)} \frac{(n_{ij} + s - k_1 - k_2)!}{(n - k_1 - k_2)! \cdot (n - s)!}$$

$$\frac{(j_{sa}^{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(D - l_i)!}$$

$$\frac{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$$

$$j_{ik}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq n + j_{sa}^{ik} - 1 \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_{sa} \leq D + s - n \wedge$$

$$D \geq n \wedge I = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^{ik} - 1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
&\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n - n_{sa} - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
&\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{(l_{sa} - l + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
&\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
&\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \\
&\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
&\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOS} = \left(\sum_{k=l}^n \sum_{(j_{ik}=j_{sa}^{ik}, j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right) \cdot \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \left(\sum_{k=l}^n \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1) l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right)$$

GÜLDÜNKYA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=1}^{(l_{ik}-1)} \sum_{\substack{(j_{sa}^{ik}+1) \\ (j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
 \end{aligned}$$

GÜLDENSKY A

$$\sum_{k=l}^{(\cdot)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{sa})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{(\cdot)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-k_2)}^{(\cdot)}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - k_1)!}{(l_s + j_{sa} - j_{sa}^{ik} - k_1)! \cdot (j_{sa} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l - k_1)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (l_s + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$
- $D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} \leq l - j_{sa}^{ik} \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa} + 1 = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} >$
- $D + j_{sa} - n < l_s \leq D + j_{sa} - n - j_{sa}^{ik} \wedge$
- $D \geq l_s < n \wedge l = k_1 \geq 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^i, j_{sa}^{ik}, k_2, j_{sa}^s, \dots, j_{sa}^i\} \wedge$
- $s \geq 4 \wedge s = k_1 + k_2 \wedge$
- $k_2 = k_1 \wedge k = k_1 + k_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
& \frac{(n + j_{sa} - n - s)!}{(n + j_{sa} - n - s)! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{(l_{ik}-1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(j_{sa}^{ik}-1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \\
& \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{DOST}}} = \left(\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\quad)} \sum_{l_s+j_{sa}-l}^{(\quad)} \sum_{j_{sa}=n-D}^{(\quad)} \right) \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \left(\sum_{k=l}^{(j_{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\quad)} \sum_{j_{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right) \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^n \sum_{\substack{j_{ik}=j_{sa}^{ik}+j_{sa}^{ik-l} \\ n_i=n+l_k \quad (n_{ik}=n+l_{k_2}-j_{ik}+1) \\ n_{sa}=n-j^{sa}+1}} \sum_{\substack{j_{sa}^{ik-l} \\ n_{sa}=l_s+j_{sa}-l+1}} \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{k=l}^n \sum_{\substack{() \\ (j_{ik}=j_{sa}^{ik}+j_{sa}^{ik-l}-j_{sa})}} \sum_{\substack{() \\ j^{sa}=l_i+n+j_{sa}-D-s}}^{l_s+j_{sa}-l}
 \end{aligned}$$

GUIDANCE

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{lk}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq i \wedge l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n - j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = l_s = 0 \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{ \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}, \dots, j_{sa}^i \}$$

$$\geq 4 \wedge l_s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_z \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa})!}$$

$$\sum_{(j_{ik}=l_i+n_{ik}-D-s)}^{(1+j_{sa}^{ik}-l)}$$

$$\sum_{i=n+l_k}^{n_i} \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{i=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{(\cdot)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D > n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D - l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{(j_{sa}=j_{ik}-j_{sa}-j_{sa}^{ik})} \right) \cdot \sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2} \frac{(n_i - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \Bigg) + \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right) \cdot \sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{ik}-l)} \cdot \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}+j_{ik}+1)}^{(n_i-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}_2)} \cdot \\
 & \frac{(n_i - j^{sa} - 1)!}{(j_{ik} - j_{sa}^{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-l+1)} \cdot \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDENWA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - 1 \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > 0 \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s = 4 \wedge s = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{\binom{(l_s + j_{sa}^{ik} - l)}{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{\binom{(n_i - j_{ik} - \mathbb{k}_1 + 1)}{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}} \sum_{\binom{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}{n_{sa} = n - j^{sa} + 1}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left(\sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + j^{sa} = j_{sa} - l + 1)} \sum_{j_{sa} = j_{sa} - l + 1}^{n - D} \right) \\
 & \sum_{n_i = n + l_{ik}}^n \sum_{(n_i - j_{ik} - 1)}^{(n_i - j_{ik} - 1)} \sum_{(n_{ik} + j_{ik} - j^{sa} - l_{ik} + 1)}^{n_{ik} + j_{ik} - j^{sa} - l_{ik} + 1} \\
 & \frac{(n_i - n_{ik})!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1} \\
 & \sum_{n_i = n + l_{ik}}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{(n_{sa} = n - j^{sa} + 1)}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{sa} - j_{sa})!} \cdot \frac{\binom{D + j_{sa} - l_{sa} - s}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - 1)!} - \sum_{k_1=0}^{(l_{sa} + j_{sa}^{ik} - l)} \sum_{k_2=0}^{(n - j_{sa} - 1)} \binom{(j_{ik} - l_{ik} - D - s) - k_1}{(j_{ik} - l_{ik} - D - s) - k_1} \binom{(n - j_{sa} - 1) - k_2}{(n - j_{sa} - 1) - k_2} \sum_{k=0}^n \sum_{l_{is}=n+k}^{(n_i - j_s + 1)} \binom{()}{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})} \sum_{k_1=0}^{(n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1)} \binom{()}{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D > l_i \wedge n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z \mathcal{S}_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\mathbb{l}_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}, n_{sa}=n_{sa}^{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \frac{(n_{ik}-j_{sa}-\mathbb{k}_2)}{(n_{ik}-n_{ik}-1)! \cdot (j_{ik}-2)! \cdot (n_{sa}-n_{ik}-j_{ik}+1)! \cdot (j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_{sa})! \cdot (n_{sa}-j_{sa}-n_{sa}^{ik}-1)! \cdot (n-j_{sa})! \cdot (n_{sa}-l-j_{sa}^{ik})! \cdot (n_{sa}-j_{sa}^{ik}+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=l}^{(\mathbb{l}_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i-s-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)! \cdot (n-s)!} \cdot \frac{(\mathbb{l}_s-l-1)!}{(\mathbb{l}_s+j_{sa}^{ik}-j_{ik}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

GÜLDENYA

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{j_{sa}^{ik} = j_{sa} - 1}^{(l_{sa} + j_{sa}^{ik} - j_{sa} + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(j_{sa} - j_{sa}^{ik} + 1)} \sum_{i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa})}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s - (n - 1) \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$(D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$\{j_{sa}^s, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
 f_{z} S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_i+j_{sa}-l-s+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} j^{sa}=l_i+n+j_{sa}-D-s$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{ik})}^{(n_i+l_k+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-k_1}^{(\quad)} \sum_{(n_{ik}=n_{is}-j^{sa}-k_2)}^{(\quad)} \frac{(n_{ik}-s-k_1-k_2)!}{(n_{ik}-s-k_1-k_2)! \cdot (n-s)!}$$

$$\frac{(j_{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(j_{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{j_{sa}=l_i+j_{sa}^{ik}-D-s}^{l_i+j_{sa}-l-s+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} - n_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{n_s + j_{sa} - l}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_{sa} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{ik} - j_{sa} - l_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_i + j_{sa} - l - s + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}^{n_s + j_{sa} - l}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

GÜLDÜZMAYA

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\substack{l_s = a-l \\ a=l+n+l_{sa}-D-s}}^{l_s = a-l} \sum_{n=n+k}^{(n_i - j_s)} \sum_{(n_i - k + k + j_{sa}^{ik} - j_{ik})} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-k_1} \sum_{(n_{ik}+j_{ik}-j^{sa}-k_2)} \frac{(n_i - s - k_1 - k_2)!}{(n_i - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_{sa} \leq l \wedge l_{sa} \leq D - n \wedge l_{sa} \geq l$$

$$j_{sa}^{ik} - j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge$$

$$l_{ik} - j_{ik} + 1 = l_{sa} - j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - s \leq l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$s \geq n - 1 \wedge I = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$lk_z: z = 2 \wedge lk = lk_1 + lk_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{ik}+j_{ik}-j^{sa}-lk_2}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{ik}=n+lk_2-j_{ik}+1)}^{(n_i-j_{ik}-lk_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-lk_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik})! (l_{ik} - j_{sa})!}{(l_{sa} - j_{sa} - l_{ik})! (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-lk_2}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{ik}=n+lk_2-j_{ik}+1)}^{(n_i-j_{ik}-lk_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-lk_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

GÜLDÜZ

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n, n+k}^n \sum_{(n_{is} = n_{is} + j_{sa}^{ik} - k_1 - k_2)}^{(n_{is} + 1)} j_{ik}$$

$$\sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - k_1 - k_2)}^{(n_{ik} + 1)} j_{sa} - k_2$$

$$\frac{(n_{ik} - s - k_1 - k_2)!}{(n_{ik} - n - k_2)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(j_{sa} - l_i)!}{(D + j_{sa} + j_{sa}^{ik} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l_i \wedge l_s \leq D - n - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - j_{sa}^{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D > n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s \in \{1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n - n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\cdot \frac{(j_{ik} - j_{sa} - 1)!}{(n_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \frac{(D - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 &\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{\binom{D+j_{sa}-l-j_{sa}^{ik}+1}{j_{ik}+j_{sa}-j_{sa}^{ik}-j_{sa}+1}} \sum_{j_{sa}=j_{sa}+1}^{\binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}+1}} \sum_{n_i=n+k}^{\binom{n_i-j_{ik}+1}{n_{ik}+j_{ik}-j_{sa}-k_2}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{n_{ik}+j_{ik}-j_{sa}-k_2}{n_{sa}=n-j_{sa}+1}} \frac{(n_i - n_{ik} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{\binom{D+j_{sa}-l-j_{sa}^{ik}+1}{j_{ik}+j_{sa}-j_{sa}^{ik}-j_{sa}+1}} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{\binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}+1}} \sum_{n_i=n+k}^{\binom{n_i-j_s+1}{n_{is}=n+k+j_{sa}^{ik}-j_{ik}}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_1 + z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is} \dots)}^{(n_{is}+1)}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{sa}-l_{k_2})} \sum_{(n_{ik} \dots)}^{(\dots)}$$

$$\frac{(n - s - l_{k_1} - l_{k_2})!}{(n - s - l_{k_2})! \cdot (n - s)!} \cdot \frac{(l_{sa} - l - 1)!}{(l_{sa} + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + \dots$$

$$l_{ik} - j_{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - l_i \leq D + \dots + s - n - 1 \wedge$$

$$D > \dots \wedge l = l \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\dots \{j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik} j_{sa}}^{DOST} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_{sa} - j^{sa} - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_{ik} - j_{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 &\frac{(D - j_{sa} - l_{sa} - s)!}{(D - j^{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 &\sum_{k=l}^{(l_{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}}^{(n_{ik}-j_{sa}^{ik}-l_{k_1})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_{sa}-j_{sa}^{ik}-l_{k_2})} \\
 &\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa})} \sum_{j_{sa}^{ik}+1}^{j_{sa}^{ik}} \sum_{j_{sa}^{ik} - j_{sa}}^{j_{sa}^{ik} - j_{sa} - 1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_{ik_2}-j_{ik}+1}^{(n_i - j_{ik} - 1) + 1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k}_1 = 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}^{ik} - 1, j_{sa}^{ik} - 1, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2, \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{sa}+1}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} l_{ik+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=1}^{(l_{ik}-1)} \sum_{(j_{sa}^{ik}+1)}^{l_{sa}-l+1} j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2 \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=j_{sa}+1)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}_2)}^{(n_i-s-\mathbb{k}_1-\mathbb{k}_2)}$$

$$\frac{(n_i-s-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)! \cdot (n-s)!}$$

$$\frac{(l_s-l-\mathbb{k}_1-\mathbb{k}_2)!}{(l_s+j_{sa}-j_{sa}^{ik}-\mathbb{k}_1-\mathbb{k}_2)! \cdot (j_{sa}^{ik}-j_{sa}-1)!}$$

$$\frac{(D-n)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \dots)}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - \dots + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1) \dots}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - \dots)!}$$

$$\frac{(n_{sa} - \dots)!}{(n_{sa} - j^{sa} - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

GÜLDENKA

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + 1 \wedge$$

$$k_2 : z = 2 \wedge k_2 = k_1 + 1 \Rightarrow$$

$$f_z^{DOST} S_{j_{ik}, j_{sa}}^{j^{sa}} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_{sa} + n - D}^{n_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}+1} \sum_{(j_{sa}+j_{sa}^{ik}-j_{sa}^{ik}+2)}^{l_{sa}+1} \sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_{ik}-l_{ik}+1)}^{(n_i-j_{ik}-l_{ik}+1)} \sum_{(n_{ik}+j_{ik}-l_{ik}-k_2)}^{n_{ik}+j_{ik}-l_{ik}-k_2} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{sa}=n-j^{sa}+1} \frac{(n_i - n_{ik} - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()}$$

GÜLDENWA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + s - n - 1)$$

$$D \geq n < n \wedge I = 1 \wedge I \geq 0 \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^{i-1} \wedge j_{sa}^{ik} = j_{sa}^{i-1} - 1 \wedge j_{sa}^s \leq j_{sa}^{i-1} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{i-1}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge I = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{n_i=l_{sa}+n-k-D-j_{sa}}^{(n_i-j_{ik}-1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_{sa}-j_{ik}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{(n_i - n_{ik} - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(n_i-j_{ik}-1)}$$

GÜLDENWA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{lk}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{lk})}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa}^{lk})! \cdot (n - j_{sa}^{lk} - j^{sa} - s - l)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{lk} > l_s \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{lk} + 1 > l_s \wedge$$

$$(l_{sa} + j_{sa}^{ik} - j_{sa}^{lk} > l_s \wedge (D + s - n) \leq D - n + 1 \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$\{j_{sa}^s, \mathbb{k}_1, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l}^n \binom{n_i+l-1}{n_i+l-k} \binom{n_i+l-1}{n_i+l-k-j_{ik}}$$

$$\sum_{n_{ik}=n_i+j_{sa}-l-k_1-k_2}^{(\quad)} \sum_{j_{sa}=j_{sa}+1}^{(\quad)} \frac{(n_i+l-1-k_1-k_2)!}{(n_i+l-k_1-k_2)! \cdot (n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_s - l - 1)!}{(D + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$j_{sa} = s + l \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right)$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right. \\
& \left. \left(\sum_{k=l}^{j^{sa}+j_{sa}^{ik}-1} \sum_{\substack{(j_{ik}-l_{k_1}+1) \\ (j_{ik}-l_{k_2}+1)}} \sum_{j^{sa}=j_{sa}+2}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right) \right) \\
& \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right)
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{lk}+1)}^{(l_{ik}-l+1)} j^{sa=l_{ik}+j_{sa}-l-j_{sa}^{lk}+2} \sum_{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{lk}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2} - j_{sa} - 1)!} \cdot \\
 & \frac{(n_i - n_{sa} - 1)!}{(n_i + j^{sa} - n_{sa} - 1)! \cdot (n - j^{sa} - l_{k_1} - 1)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot \\
 & \left(\frac{(D + j_{sa} - n_{sa} - s)!}{(D + j^{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{lk}+j_{sa}^{ik}-j_{sa})}^{()} j^{sa=j_{sa}+1} \sum_{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOS} = \left(\sum_{k=l}^{(l_{ik}-l+1)} (j_{ik}-j_{sa}^{ik}+1) j^{sa=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\ \left. \sum_{n_i=n+\mathbb{k}}^n (n_i-j_{ik}-\mathbb{k}_1+1) n_{ik}+j_{ik}-j^{sa-\mathbb{k}_2} \right. \\ \left. \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}=n-j^{sa}+1} (n_{ik}=n+\mathbb{k}_2-j_{ik}+1) \right) \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\ \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} j^{sa=j_{ik}+j_{sa}-j_{sa}^{ik}+1} \right. \\ \left. \sum_{n_i=n+\mathbb{k}}^n (n_i-j_{ik}-\mathbb{k}_1+1) n_{ik}+j_{ik}-j^{sa-\mathbb{k}_2} \right. \\ \left. \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}=n-j^{sa}+1} (n_{ik}=n+\mathbb{k}_2-j_{ik}+1) \right)$$

GÜLDÜNKYA

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j^{sa} - l_{sa} - j_{sa}^{ik})!}{(D + j^{sa} - n - l_{sa} - j_{sa}^{ik} - s)!} \cdot \sum_{k=j_{sa}^{ik}+1}^{n} \sum_{a=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D > n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{ik, j_{sa}^{ik}} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - (n_i - j_s + 1))}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(\cdot)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{(\cdot)}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - k_1)!}{(l_s + j_{sa} - j_{ik} - k_1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l - k_1)!}{(D + j_{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$
- $2 \leq l \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} - 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa} + 1 > l_s \wedge l_{ik} + j_{sa} - j_{sa}^{ik} >$
- $D + j_{sa} - n < l_s \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$
- $D \geq l_s < n \wedge l = k_2 = 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^i, j_{sa}^{ik}, k_2, j_{sa}^s, \dots, j_{sa}^i\} \wedge$
- $s \geq 4 \wedge s = l_s + k_2 \wedge$
- $l_s = l_s + k_2 = k_1 + k_2 \Rightarrow$

$$f_Z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})}^{(\cdot)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right. \\
 & \left. \left(\sum_{k=l}^{j^{sa}+j_{sa}^{ik}-1} \sum_{\substack{(j_{ik}-l_{k_1}+1) \\ (j_{ik}-l_{k_2}+1)}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right) \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +
 \end{aligned}$$

GÜLDENKA

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} j^{sa=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left(\frac{(D + j_{sa}^{ik} - j_{sa} - s)!}{(D + j_{sa}^{ik} - j_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} j^{sa=l_i+n+j_{sa}-D-s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l}^{l+1} \sum_{i_{ik}=l_{sa}+n+j_{sa}^{ik}}^{D-j_{sa}} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{i_{ik}=\mathbb{k}_1+1}^n \sum_{i_{ik}=\mathbb{k}_2-j_{ik}+1}^{i_{ik}-\mathbb{k}_1+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \left(\sum_{k=l}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{j_{ik}=l_{sa}}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=l_{sa}-D-j_{sa}}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
 \end{aligned}$$

GÜLDÜŞÜK

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{sa}^{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa}^{ik} - k_2)}^{(\cdot)}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l + 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l + 1)}{(D + j^{sa} + s - n - j_{sa}^{ik} - j_{sa}^{ik} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa}^{ik} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq n + l_s + j_{sa}^{ik} - n \wedge$

$D \geq n < n \wedge l - k \geq 0 \wedge$

$j_{sa} \geq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq j_{sa}^s = s + 1$

$k_z: z = 2, \dots, k = k_1 + k_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - l_{sa})!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{\substack{0 \leq l_{ik} + n - l_{sa} - j_{sa}^{ik} \\ l_{ik} + n - l_{sa} - j_{sa}^{ik} = n + \mathbb{k}}} \sum_{\substack{0 \leq n_i - j_s + 1 \\ n_i = n + \mathbb{k} + j_{sa}^{ik} - j_{ik}}} \sum_{\substack{0 \leq n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1 \\ n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq n + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

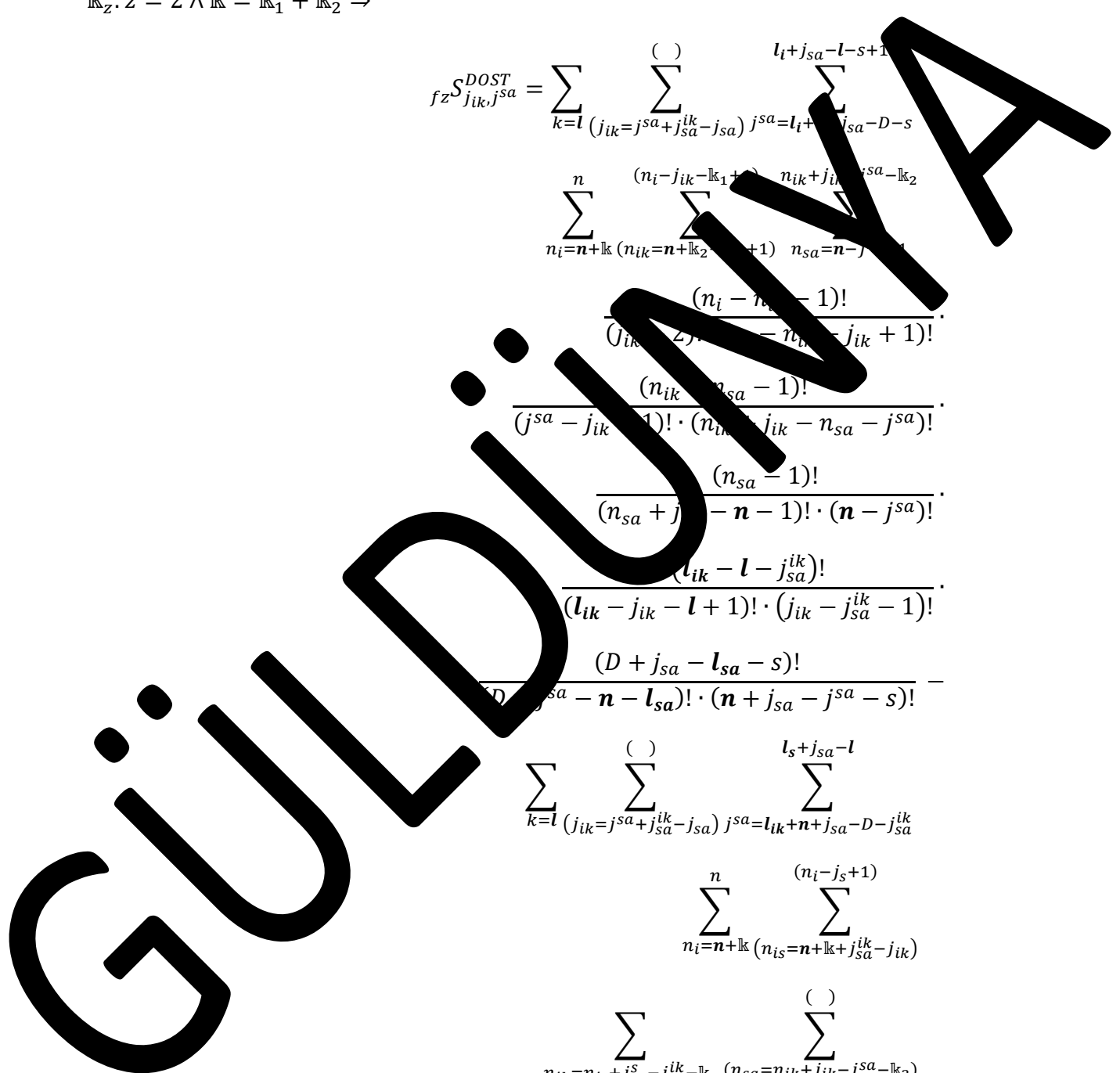
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\binom{()}{j_{sa}^s=l_i+j_{sa}-D-s}} \sum_{\binom{()}{l_i+j_{sa}-l-s+1}} \sum_{\binom{()}{n_i=n+\mathbb{k}}} \sum_{\binom{()}{n_{ik}=n+\mathbb{k}_2}} \sum_{\binom{()}{n_{sa}=n-j_{sa}+\mathbb{k}_2}} \sum_{\binom{()}{n_i=n+\mathbb{k}}} \sum_{\binom{()}{n_{sa}=n-j_{sa}+\mathbb{k}_2}} \frac{(n_i - j_{ik} - \mathbb{k}_1 + 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)!}{(j_{ik} - l + 1)! \cdot (n_{ik} - j_{ik} - 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\binom{()}{j_{sa}^s=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}} \sum_{\binom{()}{l_s+j_{sa}-l}} \sum_{\binom{()}{n_i=n+\mathbb{k}}} \sum_{\binom{()}{n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik}}} \sum_{\binom{()}{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2}} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{k=l}^{(l_i + j_{sa}^{ik} - s + 1)} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(j_{sa}^{ik} - D - s)} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{sa} = n - j_{sa} + 1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i - j_{sa} - s = \dots \wedge$

$D + j_{sa} - n < l_{sa} \leq D + \dots + j_{sa} - n - \dots$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - \dots \wedge$

$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^{ik}\} \wedge$

$s \geq 1 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z^{DOST}_{j_{ik}, j_{sa}} = \sum_{k=l}^{(j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{l=1}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=l}^{(j_{sa}^{ik}-l-s+1)} \dots$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_{sa}^{ik}-j_{ik}+1)}^{(n_i-j_{ik}-l+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_k+2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{(l_s+j_{sa}-l)}$$

GÜLDÜZÜM

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i - j_{sa} - s = \dots \wedge$

$D + j_{sa} - n < l_{sa} \leq D + \dots + j_{sa} - n - \dots$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^{i_s} - 1 \wedge j_{sa}^{i_s} - j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{i_s} - \dots \wedge$

$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{i_s}, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 1 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{j_{ik}=l_i}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}-D-s}^{(l_i+j_{sa}-l-s+1)} \sum_{n_i=n+l_k}^n \sum_{n_{ik}=n_{ik_2}-j_{ik}+1}^{(n_i-j_{ik}-1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}-D-j_{sa}}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

GÜLDÜZÜM

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^s-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^s + s - n - l - j_{sa}^{ik})! \cdot (n - j_{sa}^s - j_{sa}^{ik} - s - l)!}$$

$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > j_{sa} \wedge$

$l_i \leq D + s - n) \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n)) \wedge$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^i \rightarrow j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$\{j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
 f_{j_{ik}, j_{sa}}^{DOST} = & \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_{ik}-k_1+1)}{n_{ik}=n+k_2-j_{ik}+1}} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa} - 1)!}{(n_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(D - j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
 & \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+k+j_{sa}^{ik}-j_{ik}}} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}} \\
 & \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

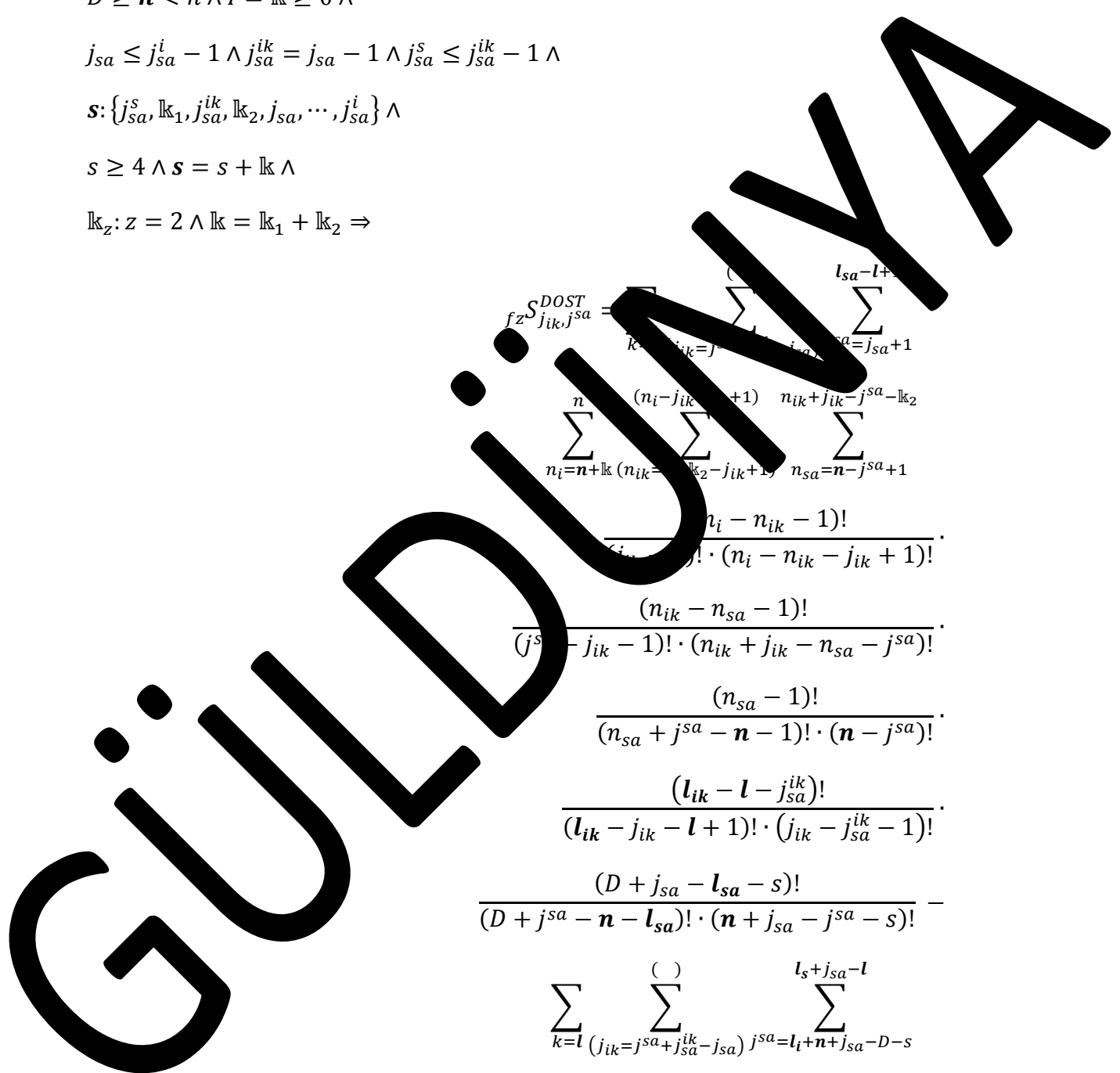
$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} = \sum_{k=0}^{\binom{l_{sa}-l+1}{j_{sa}^{ik}-j_{sa}+1}} \sum_{n_i=n+k}^n \sum_{n_{ik}=n_{ik}-k_2-j_{ik}+1}^{(n_i-j_{ik}-1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{\binom{l_s+j_{sa}-l}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}^{ik}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+k}^n \sum_{n_{is}=n+k+j_{sa}^{ik}-j_{ik}}^{\binom{n_i-j_s+1}{n_{is}=n+k+j_{sa}^{ik}-j_{ik}}}$$



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j_{sa}^s + s - n - l_i - j_{sa})! \cdot (n + j_{sa}^s - j_{sa}^{ik} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n \vee$$

$$D \geq n < n \wedge l = \mathbb{k}_1 = 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^s - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s - \mathbb{k}_1, j_{sa}^{ik} - \mathbb{k}_1, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}; z = 2, \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{(j_{sa}^s=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_s - l - j_{sa} - s)!}{(l_s + j_{sa}^{ik} - n - 1)! \cdot (n - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik})} \sum_{(j_{ik}=l_i + n_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik})} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}}^{(l_s + j_{sa}^{ik})} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \\
 & \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$(n_i - s - \mathbb{k}_1 - \mathbb{k}_2) < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} S_{j_{ik}}^D = & \sum_{l=0}^{(j_{sa}^{ik} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D} \\ & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\ & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\begin{aligned}
& \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} j^{sa} = l_s + j_{sa} - l + 1 \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{()} \sum_{(j_{ik} = j_{sa}^{ik} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_i + n + j_{sa} - D - s} \\
& \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^n \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_i - j_s + 1)} \\
& \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$\left((D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s - l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^k \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z \geq 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} \sum_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \\ &\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\ &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{l-1} \\
 & \sum_{n_i = n + k}^n \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{ik} + 1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa}^{ik} - k_2} \\
 & \frac{(n_i - n_{ik})!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 & \sum_{n_i = n + k}^n \sum_{n_{is} = n + k + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}^{(\quad)}
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik})!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

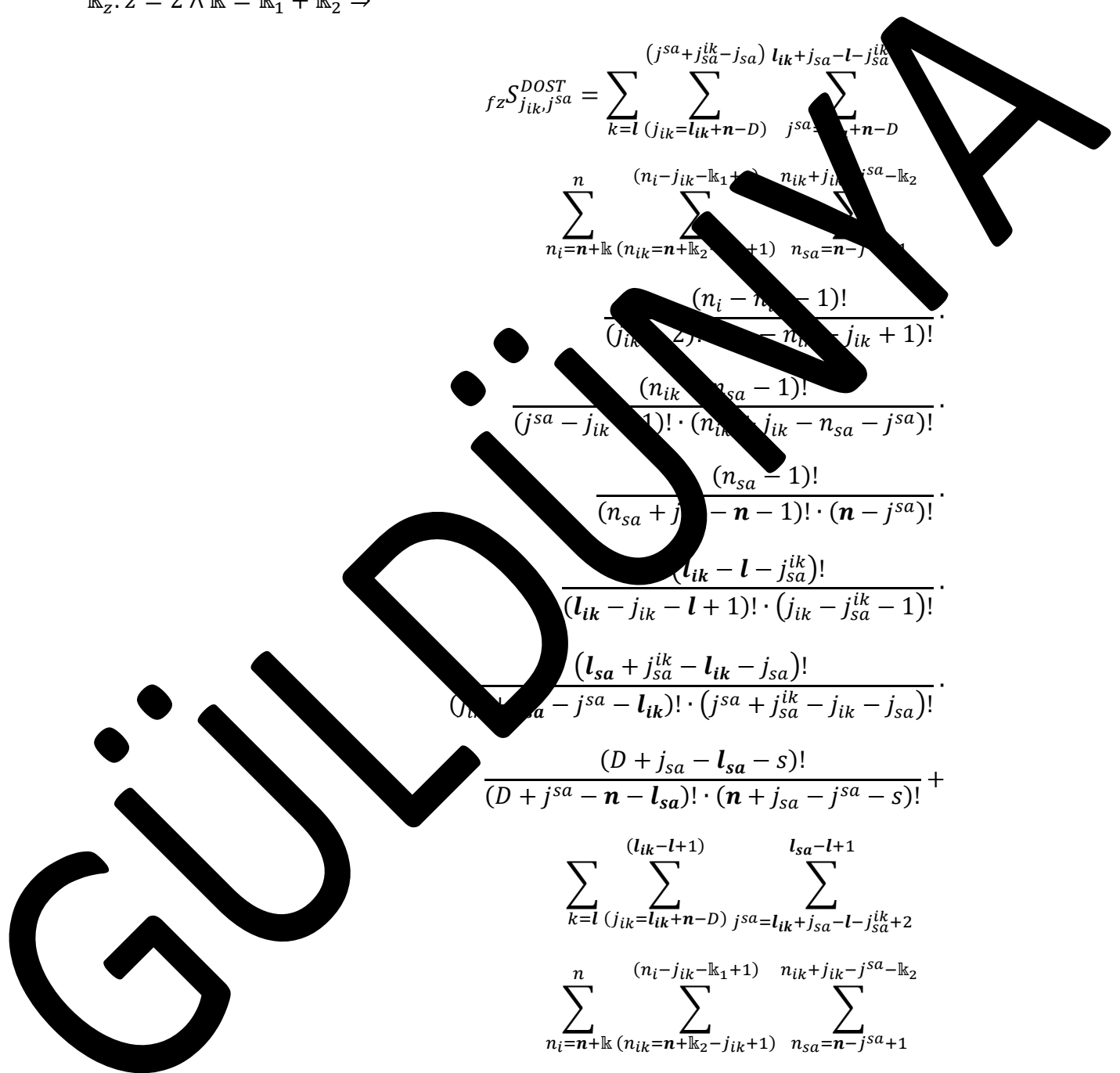
$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} - j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$



$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(n_{is}=n+l+k+j_{sa}^{ik}-j_{ik})}^{()} \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq l_i < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + 1$$

$$k: z = 2 \wedge k = k_1 + 1 \Rightarrow$$

$$f_z^S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = l_{ik} + n - D)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_{ik} - n_{sa} - 1)!}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-s) \cdot j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-l+1)} \sum_{(n_i=n+l_{sa}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}=n+l_{sa}+j_{sa}^{ik}-j_{ik})}^{(n_{ik}+j_{ik}-l_{sa}-j_{sa}^{ik})} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}-j_{ik}+1)} \frac{(n_i - n_{ik} - j_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)!} \cdot \frac{(n_{ik} + j_{ik} - n_{sa} - j^{sa})!}{(n_{ik} + j_{ik} - n_{sa} - 1)!} \cdot \frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_s+j_{sa}^{ik}-l)} \sum_{n_i=n+l_{sa}}^n \sum_{(n_{is}=n+l_{sa}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$

GÜLDÜZMAYA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$\left((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\binom{()}{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}} \\
&\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{ik}=n+l_k-j_{ik}+1}} \sum_{\binom{()}{n_{sa}=n-j_{sa}}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} + j_{sa})!} \cdot \\
&\frac{(n - n_{sa} - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
&\frac{(j_{ik} - j_{sa} - 1)!}{(n - j_{ik} - 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
&\frac{(D - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!} \\
&\sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\binom{()}{l_s+j_{sa}-l}} \\
&\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k+j_{sa}^{ik}-j_{ik}}} \\
&\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}}} \\
&\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
&\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l = i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=i}^n \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j_{sa}=j_{sa}^{sa}} \frac{\binom{n}{n_i - n_{ik} - 1} \binom{n_{ik} + j_{ik} - n_{sa} - j_{sa}}{n_{sa} = n - j_{sa} + 1}}{\binom{j_{ik} - 2}{j_{ik} - 2} \cdot \binom{n_i - n_{ik} - j_{ik} + 1}{n_i - n_{ik} - j_{ik} + 1}} \cdot \frac{\binom{n_{ik} - n_{sa} - 1}{n_{ik} - n_{sa} - 1}}{\binom{j^{sa} - j_{ik} - 1}{n_{ik} + j_{ik} - n_{sa} - j^{sa}}} \cdot \frac{\binom{n_{sa} - 1}{n_{sa} + j^{sa} - n - 1}}{\binom{n_{sa} + j^{sa} - n - 1}{n - j^{sa}}} \right) +$$

$$\left(\sum_{k=i}^n \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j_{sa}=j_{sa}^{sa} + 1}^{l_{sa} - i + 1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{\binom{n_i - n_{ik} - 1}{j_{ik} - 2} \cdot \binom{n_{ik} - n_{sa} - 1}{n_{ik} + j_{ik} - n_{sa} - j^{sa}}}{\binom{j^{sa} - j_{ik} - 1}{n_{ik} + j_{ik} - n_{sa} - j^{sa}}} \right)$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=0}^{\infty} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}^{(\cdot)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=\dots, k_1+1) n_{sa} \dots + j_{ik} - j^{sa} - k_2}^{(\cdot)} \frac{(n_i - s - k)!}{(n_i - k - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l = l \wedge l_s \leq D$
 $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$
 $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa}$
 $l_{ik} - k_1 + 1 > l_s \wedge \dots + j_{sa}^{ik} - j_{sa} = \dots$
 $l_{ik} \leq D + j_{sa}^{ik} \wedge l_i \leq \dots + s - n$
 $D \geq \dots < n \wedge l = k_1 + k_2 \wedge \dots$
 $j_{sa} \leq j_{sa}^{l-1} \wedge j_{sa}^{ik} = j_{sa}^{l-1} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge \dots$
 $s: \{j_{sa}^s, j_{sa}^{k_1}, j_{sa}^{k_2}, \dots, j_{sa}^i\} \wedge \dots$
 $s \geq 4 \wedge s \leq \dots + k \wedge \dots$
 $z = 2 \wedge k = k_1 + k_2 \Rightarrow \dots$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=0}^{\infty} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\cdot)} \sum_{j_{sa}=j_{sa}}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^i)!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} - s)!}{(l - j^{sa} - n - l_s)! \cdot (n - l_s - s)!}$$

$$\sum_{k=i}^{()} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq l_i < n \wedge l = l_i \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa}^i \wedge$

$j_{ik} - j_{sa}^i - j_{sa}^{ik} \leq j_{sa}^i \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + j_{sa}^i > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^i = l_{ik} \wedge$

$l_s \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 4 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j^{sa}}^{DOST} = \sum_{k=0}^i \binom{()}{i} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{l_{sa}-i+1} \sum_{j^{sa}=j_{sa}}^{l_{sa}-i+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \dots)}{(j_{ik} - 2)! \cdot (n - n_{ik} - \dots + 1)!}$$

$$\frac{(n_{ik} - \dots - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - \dots)!}$$

$$\frac{(n_{sa} - \dots - 1)!}{(n_{sa} - \dots - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - \dots - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - \dots + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=0}^i \binom{()}{i} \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{()}{i} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^n \sum_{l=j_{sa}^{ik}}^{l_{ik}+j_{sa}-i} \sum_{j=j_{sa}}^{j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{sa}+1}^{n_i-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i - j_{sa})!}{(l_{ik} - j_{ik} - i + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \cdot \sum_{k=i}^n \sum_{l=j_{sa}^{ik}}^{l_{ik}+j_{sa}-i} \sum_{j=j_{sa}}^{j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^{l_{sa} + j_{sa}^{ik} - i - (j_{sa} + 1)} \sum_{j_{sa}^{ik}}^{(n_{ik} - k_1 + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n_{sa} - k_2)} \sum_{n_i = n + k}^{(n_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{sa} - k_2)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \sum_{k=i}^{()} \sum_{j_{sa}^{ik}}^{()} \sum_{j_{sa} = j_{sa}}^{()} \sum_{n_i = n + k}^n \sum_{n_{ik} = n_i - j_{ik} - k_1 + 1}^{()} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}^{()} \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{k={}_i l}^{(l_{ik} - j_{sa}^{ik})} \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k={}_i l} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{i_{ik}, j_{sa}}^{DOS} = \sum_{k=i}^l \sum_{\binom{()}{j_{ik}=j_{sa}^{ik}}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \frac{(l_{sa}+j_{sa}^{ik}-i l-j_{sa}+1)}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}} \sum_{n_{sa}=n-j^{sa}+1} \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^{\binom{()}{i}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{\binom{()}{i}} \sum_{n_{sa}=n_{ik}}^{\binom{()}{i}} \sum_{k-j_{sa}-k_2}$$

$$\frac{(n_i - s - k_1 - \dots)!}{(n_i - n - k_1 - \dots)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - \dots - l_i)! \cdot (n - \dots)!}$$

$$((D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D - j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}^{(l_{ik}-i^{l+1}) l_{sa}-i^{l+1}} \\
 &\sum_{n_i=n+l}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!} \\
 &\frac{(n_i - i^{l+1})!}{(l_{ik} - i^{l+1} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(l_{sa} + j_{sa} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \\
 &\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}^{()} \\
 &\sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2}}^{()} \\
 &\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \\
 &\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$D \geq i < n \wedge l = i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$

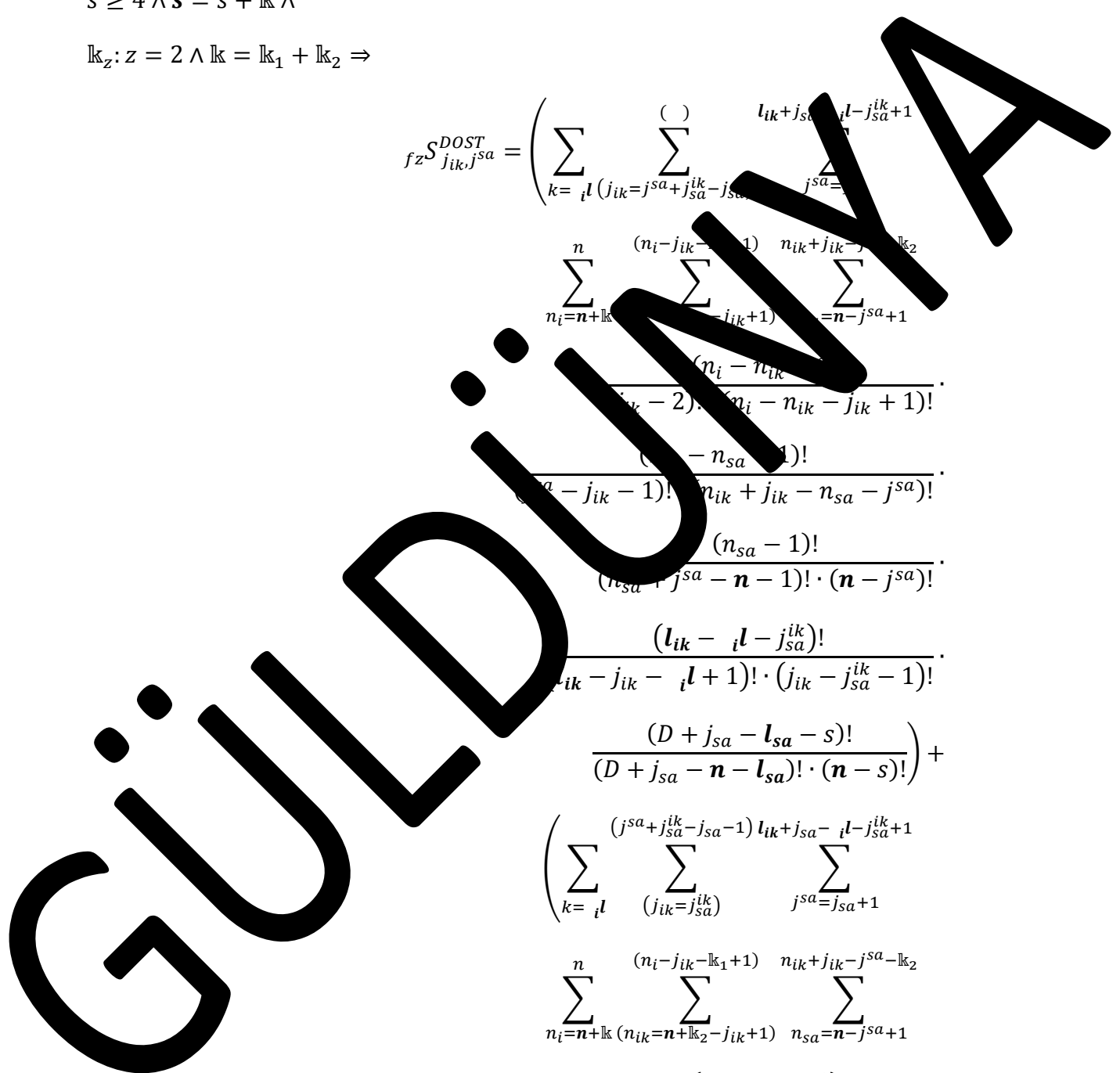
$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left(\sum_{k=i}^n \sum_{l=i}^n \sum_{j_{sa}=j_{sa}^{ik}}^{l_{ik}+j_{sa}-i-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2} \frac{(n_i - n_{ik})!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i - l - j_{sa}^{ik})!}{(j_{ik} - j_{ik} - i - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) + \left(\sum_{k=i}^n \sum_{l=i}^n \sum_{j_{sa}=j_{sa}+1}^{(j_{sa}+j_{sa}^{ik}-j_{sa}-1) l_{ik}+j_{sa}-i-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \right)$$



$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=i^l}^{(l_{ik} - i^{l+1})} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa} - i^l - j_{sa}^{ik} + 2}$$

$$\sum_{n_i=n+l_{sa}+k}^n \sum_{(n_{ik}=n+l_{sa}+k+1)}^{(j_{ik} - j_{sa}^{ik} - j^{sa} - l_{sa})} \sum_{n_{sa}=n - j_{sa}^{ik} - j^{sa} - l_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - j_{sa}^{ik} - j^{sa} - l_{sa} - k_2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=i^l}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\quad)} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_{sa}+k}^n \sum_{(n_{ik}=n_i - j_{ik} - l_{sa} + 1)}^{(\quad)} \sum_{n_{sa}=n_{ik} + j_{ik} - j^{sa} - l_{sa} - k_2}$$

GÜLDÜZÜMÜ

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{k=i}^{\binom{D+l+1}{j_{sa}^{ik}}} \sum_{j_{sa}^{ik}} \sum_{j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) +$$

$$\begin{aligned}
& \left(\sum_{k=i^l}^{(l_{ik}-i^{l+1})} \sum_{(j_{ik}=j_{sa}^{ik})}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} + j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - i^{l+1} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=i^l}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\quad)} \sum_{j^{sa}=j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=0}^{\binom{()}{i}} \sum_{l(j_{ik}=j_{sa}^i)} \sum_{j_{sa}}^{j_{sa}^i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{n_i-j_{ik}-\mathbb{k}_1+1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=0}^{\binom{()}{i}} \sum_{l(j_{ik}=j_{sa}^i)} \sum_{j_{sa}=j_{sa}^i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{\binom{()}{i}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\left((D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, \dots, j_{sa}^i\} \wedge$$

$$s = 4 \wedge s = l_{k_1} + l_{k_2} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^n \sum_{l_i(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}^{l_{sa}-l_i+1} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k_1=1}^{()} \sum_{(j_{ik}=j_{sa}^{ik}, j_{sa}=j_{sa})} \sum_{n_i=n+k_1}^n \sum_{(n_{ik}=n-k_1+1, n_{sa}=n-k_1+j_{ik}-j^{sa}-k_2)}^{()} \frac{(n_i - k_1 - k_2)!}{(n_i - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(n + s - n - l_i)! \cdot (n - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1) \wedge (l_s > l_{sa} - j_{sa}^{ik} + 1) \wedge \\ & 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1) \wedge (l_s > l_{sa} - j_{sa}^{ik} + 1) \wedge \\ & 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & (l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge \\ & D \geq n < n \wedge I = k > 0 \wedge \\ & j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\ & s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge \end{aligned}$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j^{sa}}^{DOST} = \left(\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\left. \frac{(D + j_{sa} - n - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left(\sum_{k=l} \sum_{\binom{()}{j_{ik}=l_{ik}+n-D}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \sum_{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{is}=n+l_k-j_{sa}^{ik}+1)}^{n_{ik}+j_{sa}-l-j_{sa}^{ik}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - l_{k_1} - 1)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{sa} - l_{sa} - 1)!}{(j_{sa} - l_{sa} - 1)! \cdot (n_{sa} + j_{sa} - l_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

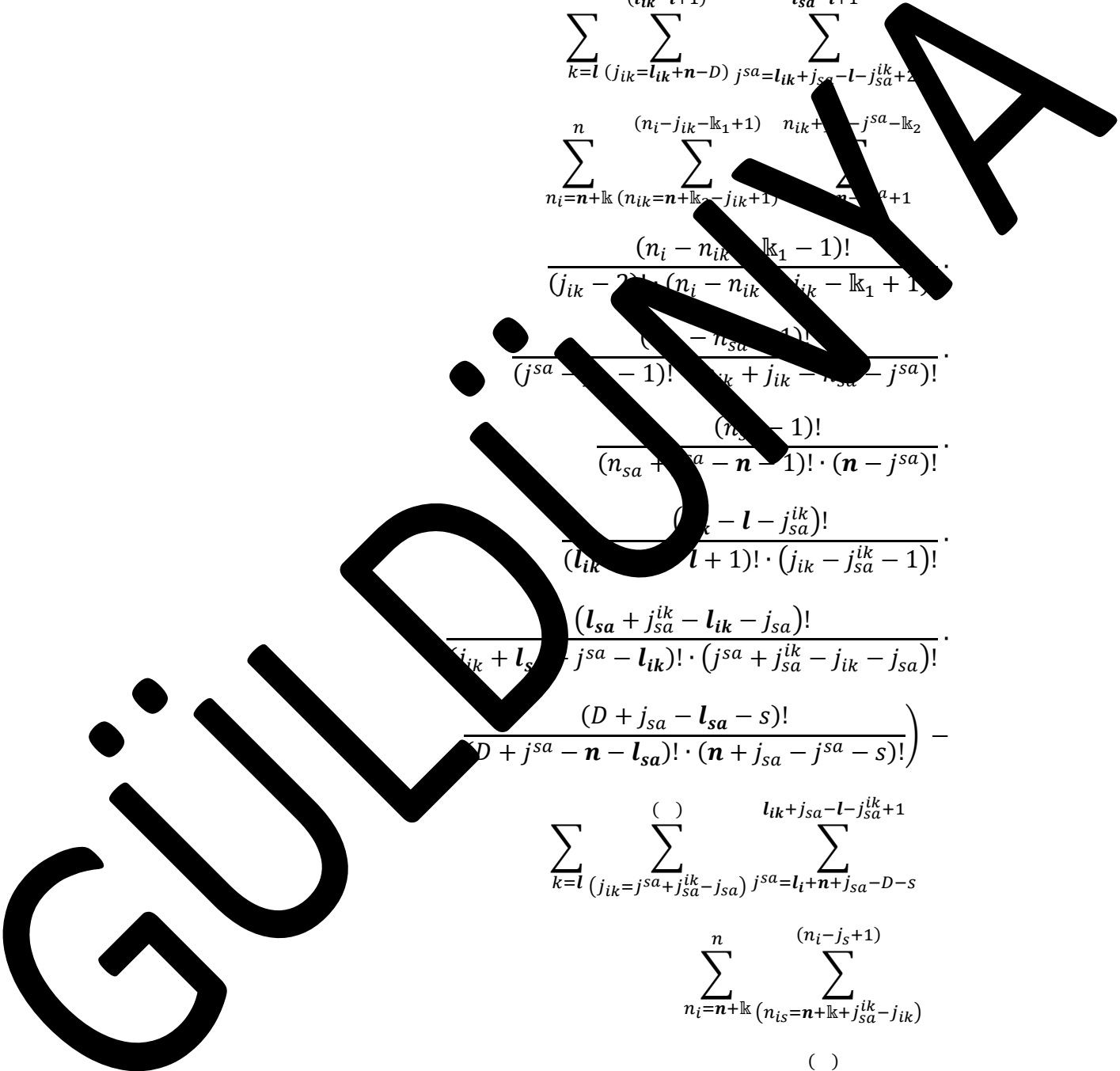
$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^{s_1}, \mathbb{k}_1, j_{sa}^{s_2}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s_1 \wedge s_2 \wedge$$

$$\mathbb{k}_2: 2 \leq \mathbb{k}_2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(n_{is}=n+l+k+j_{sa}^{ik}-j_{sa}-j_{sa}^{ik}+1)} \sum_{(n_{is}=n+l+k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned} & ((D \geq l_s < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \end{aligned}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \Big) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{ik}-l+1)} \right. \\ \left. \sum_{(n_i=n+\mathbb{k}_1)}^{(n_i=n+\mathbb{k}_1-1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{sa}=n-j_{sa}+1)} \right. \\ \left. \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - n_{sa} - 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right. \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \right. \\ \left. \sum_{(n_i=n+\mathbb{k}_1)}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \right. \\ \left. \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \right)$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik+1}}^{l_{sa}-l+1} \frac{(n_i - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \sum_{n_i=n+\mathbb{k}_2}^n \sum_{(n_{ik}=n_{sa}-j_{ik}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}-D-s} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
 \end{aligned}$$

GÜLDENWA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{lk}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{lk} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik}$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{lk} - 1 \wedge j_{sa}^{lk} - j_{sa} - 1 \wedge j_{sa}^{lk} - j_{sa}^{ik} -$$

$$s \in \{s_{sa}^{ls}, \dots, \mathbb{k}_1, j_{sa}^{lk}, \mathbb{k}_2, j_{sa}^{lk}, j_{sa}^{lk}\} \wedge$$

$$s \geq \mathbb{k} \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z: z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{lk}}} = \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa})}^{(\quad)} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j_{sa}^{lk} = l_{sa} + n - D \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - l + 1)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - 1)} \sum_{j^{sa} = l_{sa} + n - 1} \right)$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n - j_{ik})} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

GÜLDEN

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^n \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik-l})} \sum_{j^{sa}=l_{sa}+n-D}^{(l_{sa}+j_{sa}^{ik-l})}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^n \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik-l})} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{sa}+j_{sa}-l}$$

GÜLDÜZMİNAR

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n +$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik}$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{sa} = j_{sa}^{ik} -$

$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}^{ik}, j_{sa}^i\} \wedge$

$s \geq \bar{\quad} \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = \quad \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa})!} \cdot \\
& \sum_{j_{ik}=l_i+n_{ik}-D-s}^{(1+j_{sa}^{ik}-l)} \sum_{j_{sa}^{ik}=n_{ik}-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{k_1=n+l_{sa}}^{n_{sa}} \sum_{k_2=n+l_{sa}+j_{sa}^{ik}-j_{ik}}^{(n_i-j_s+1)} \sum_{k_1=n_{sa}-n_{ik}+j_{sa}^{ik}-k_2}^{(n_i-j_s+1)} \\
& \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D - j_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} - j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} j_{sa} = j_{sa} - j_{sa}^{ik} \right. \\ \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1)} \sum_{n_{sa} = n - j_{sa}^{ik} - \mathbb{k}_2}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \\ \frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ \left. \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left(\sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)} \sum_{j_{sa} = l_{sa} + n - D}^{l_{sa} - l + 1} \right. \\ \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\ \left. \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} + 1} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1)} \\
 & \sum_{n_i = n + k}^n \sum_{(n_i - j_{ik} = k - 1)}^{(n_i - j_{ik} - 1)} \sum_{(n_{ik} = n - j_{sa} + 1)}^{n_{ik} + j_{ik} - j_{sa}^{ik} - k_2} \\
 & \frac{(n_i - n_{ik} - k_1)!}{(j_{ik} - k_1)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{(\quad)}
 \end{aligned}$$

GÜLDÜŞMÜŞ

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{k=l}^n \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa} = l_i + n + j_{sa} - D - s$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{sa}}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}_2}}^{(n_i-j_s+1)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n_i - s)!}$$

$$\frac{(l_s - l + 1)!}{(l_s + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{sa}^{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - s)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n \wedge l = \mathbb{k}_1 + 0 \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{ik}, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^{ik}\}$$

$$\geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{l_s-l+1}^{l_s-l+1} j^{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}^{sa}=l_i+n+j_{sa}-D)}$$

$$\sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n \wedge n \wedge l_s > D - 1 \wedge$
 $j_{sa}^{ik} + 1 \leq j_{ik} < j^{sa} + j_{sa} - j_{sa} \wedge$
 $j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
 $l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$
 $D - 1 \wedge n \wedge I = l_k > 0 \wedge$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + l_k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{sa} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{l_i=l}^{(s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^i < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa})} \sum_{(j_{ik} = l_i + n - l)} \sum_{j_{sa} = j_{sa} - j_{sa}^{ik}}^{(n - j_{sa} - j_{sa}^{ik} + 1)}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n_{ik} - k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - j_{ik} - k_1 - 1)!}{(j_{ik} - k_1)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n - j_{sa} + 1)}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_{sa} + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} -$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{z, S, D, T}^{j_{sa}} = \sum_{k=l} \sum_{\binom{(j^{sa}+j_{sa}^{ik}-j_{sa})}{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}} \sum_{\binom{l_s+j_{sa}-l}{j^{sa}=l_i+n+j_{sa}-D-s}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\binom{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}{n_{sa}=n-j^{sa}+1}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D)}^{l_{ik} + j_{sa} - l - s + 1} \sum_{(j_{sa} = l_s + n - l + 1)}$$

$$\sum_{n_i = n + k_1}^n \sum_{(n_{ik} = j_{ik} + 1)}^{(n_i - j_{ik} - 1)} \sum_{(n_{sa} = n - j_{sa} + 1)}^{n_{ik} + j_{ik} - k_2}$$

$$\frac{(n_{ik} - n_{sa} - k_1)!}{(j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_{sa} + n - D}$$

$$\sum_{n_i = n + k_1}^n \sum_{(n_{is} = n + k_1 + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{()}$$

GÜLDENWA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{ik}^{DOST} = \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{j_{sa}^{sa}=l_i+j_{sa}-l-s+1} \sum_{j_{sa}^{sa}=l_i+n+j_{sa}-D-s} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{l_i + j_{sa} - l - s + 1} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - k_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa}^{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

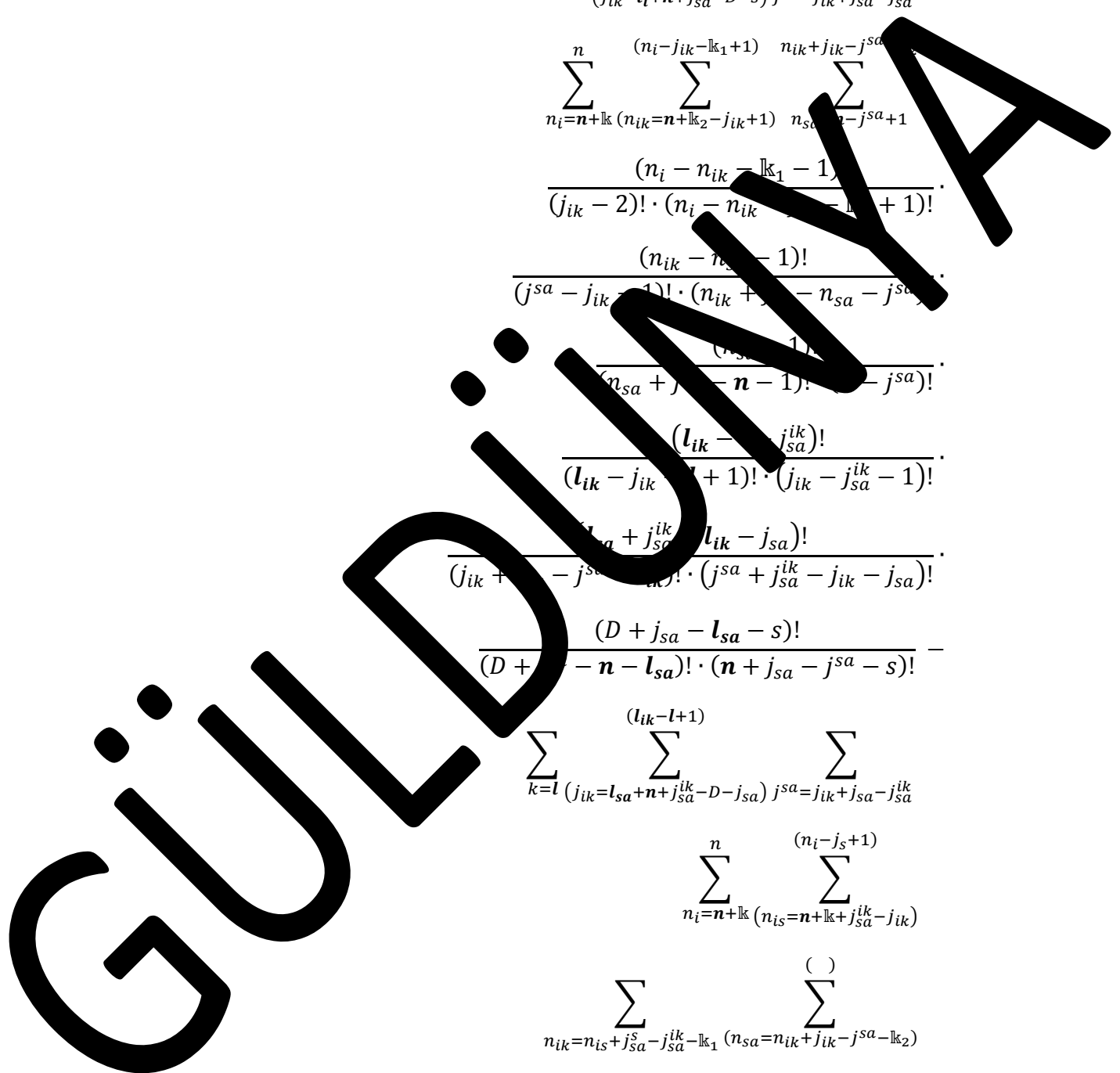
$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{(l_{ik} - l + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + 1 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{l_{sa} - l}{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}} \sum_{n_i = n + k}^{\binom{l_{sa} - l}{n_i = n + k + j_{sa}^{ik} - j_{ik}}} \frac{(n_i - s - k_1 - k_2)!}{(n_i - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa}^{ik} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(n_i - j_s + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n_i - j_s + 1)}$$

$$\sum_{n_i = n + k}^{(n_i - k_1 + 1)} \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{j_{sa} - k_2} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_i - n_{ik} - k_1 - 1)!}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(n_i - j_s - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(n_i - j_s + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n_i - j_s + 1)}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{()}$$

GÜLDÜZİNYA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1, j_{sa}^s < j_{sa}^{ik} - 1$

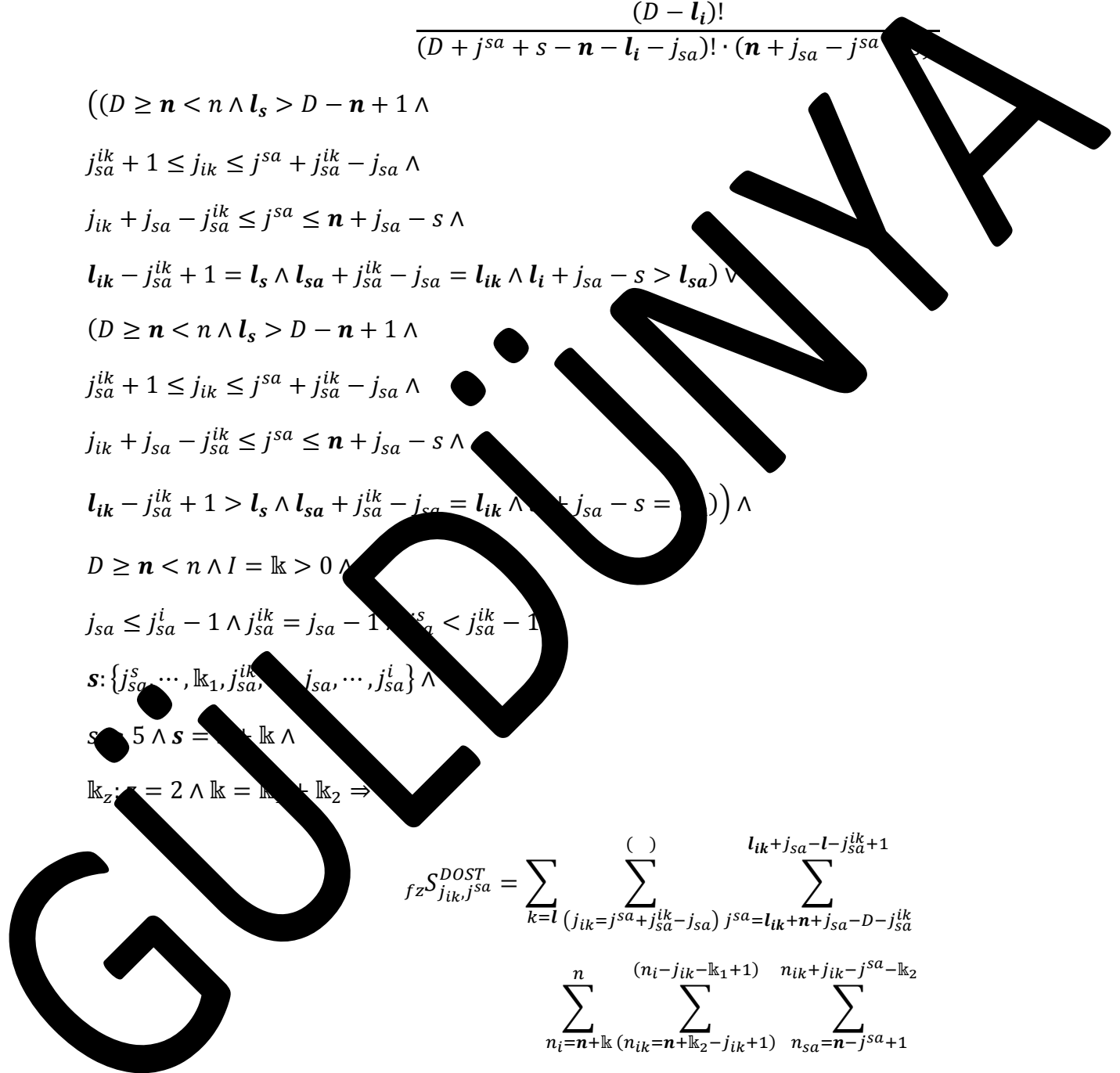
$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^l\} \wedge$

$s = 5 \wedge s = \dots + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_{ik}=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$



$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{l_{sa}}{j_{sa}^{sa} - l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_{sa} + j_{sa} - l} \sum_{(n_i = n + \mathbb{k}_1 + j_{sa}^{ik} - j_{ik})}^{n_{sa} - l - D - s} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1)}^{n_i - \mathbb{k}_1 - \mathbb{k}_2} \frac{(n_i - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n + 1 \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} + j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n + 1 \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 < j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n + 1 \wedge l = \mathbb{k} > 0 \wedge$$

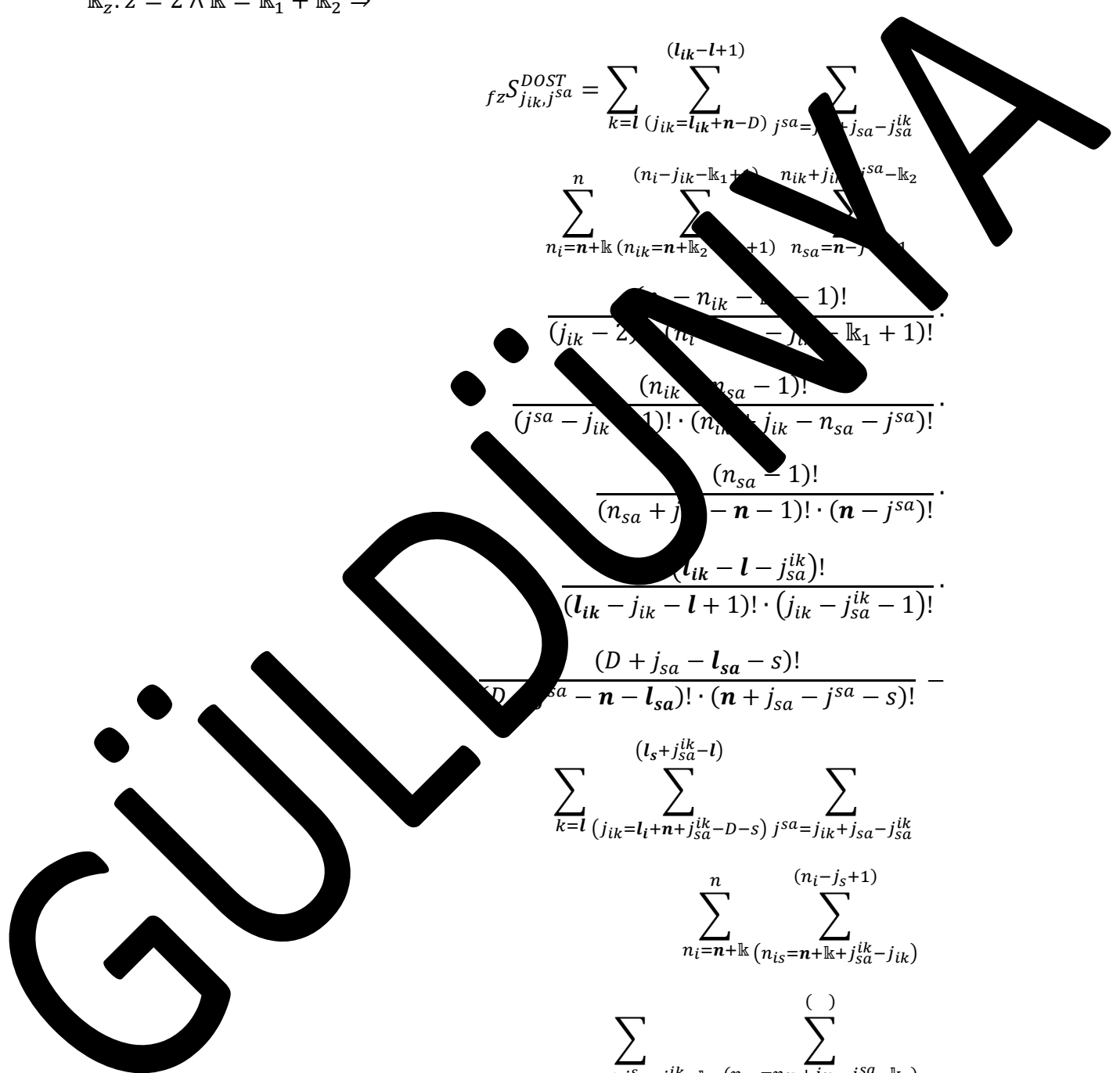
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}+j_{sa}-\mathbb{k}_2)} \frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-2)! \cdot (n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)} \frac{(n_i-s-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)! \cdot (n-s)!} \cdot \frac{(l_s-l-1)!}{(l_s+j_{sa}^{ik}-j_{ik}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{D-s} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1 \sum_{j^{sa} = l_i + n + j_{sa} - D - s}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{n_{sa} = n - j^{sa} + 1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{is}=n+l_k-j_{is}+1)}^{n_{ik}+j_{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - l_{k_1} - 1)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{sa} - l_{sa} - 1)!}{(j_{sa} - l_{sa} - 1)! \cdot (n_{sa} + j_{sa} - j_{ik} - l_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j_{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!}$$

GÜLDENWA

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z \geq 2 \wedge k = k_1 \vee k_2 \Rightarrow$$

$$\begin{aligned} \sum_{k=l}^{DOST} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \\ \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\ \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \end{aligned}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-l_{sa})}^{(l_i+l-s+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=n+l_{sa}}^n \sum_{(n_i-j_{ik}+1)}^{(n_{ik}+j_{ik}-l_{sa})} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}+j_{sa}-l_{sa})}$$

$$\frac{(n_{ik}-j_{ik}-l_{sa})!}{(j_{ik}-l_{sa}-1)! \cdot (n_{ik}-j_{ik}-l_{sa}+1)!}$$

$$\frac{(n_{sa}-j_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-n-1)! \cdot (n-j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=n+l_{sa}}^n \sum_{(n_{is}=n+l_{sa}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{sa}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{sa})}^{()}$$



$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\mathbf{n} - s)!} \cdot \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s + j_{sa}^{ik} - j_{ik} - \mathbf{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - \mathbf{n} - \mathbf{l}_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa})!}$$

$$((D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}) \vee$$

$$(D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa}) \wedge$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l} = \mathbb{k} > 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_{z^S} S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \\
 &\sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
 &\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
 &\sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
 &\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

GÜLDEN

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i+l_k-j_{ik})}^{(n_i+l_k+1)}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1}-l_{k_2})}^{()} \sum_{(j^{sa}-l_{k_2})}^{()} \frac{(n - s - l_{k_1} - l_{k_2})!}{(n - l_{k_1} - l_{k_2})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot (l_i)! \cdot (D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \end{aligned}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{POST}^{sa} = \sum_{k=l}^{n+j_{sa}^{ik}-j_{sa}-1} \sum_{j_{ik}=k+n-D}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{sa}-l+1)} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i - n_{sa} - 1)!}{(n_i + j^{sa} - n_{sa} - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 & \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_{ik}=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_i-j_s+1)} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

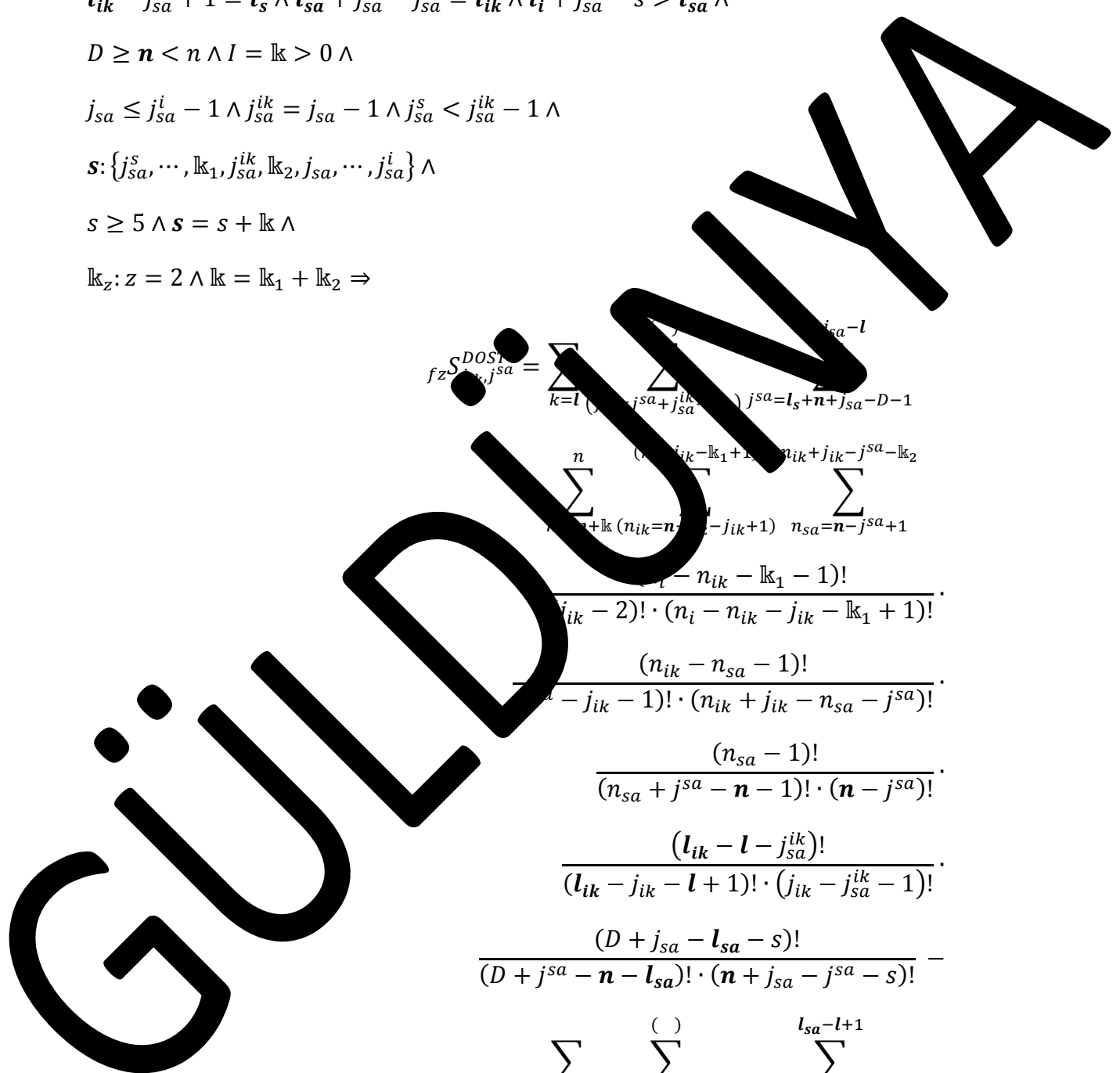
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fzS_{k,j_{sa}}^{DOS1} = \sum_{k=l}^n \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(j_{ik}-k_1+1)} \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(l_{sa}-l+1)} \frac{(n_{ik}-k_1-1)! \cdot (n_{ik}-k_2-1)! \cdot (n_i-n_{ik}-j_{ik}-k_1+1)! \cdot (n_{ik}-n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})! \cdot (n_{sa}-1)!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \sum_{k=l}^n \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(l_{sa}-l+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} -$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \dots + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} \sum_{k=l}^{OST} \sum_{j_{ik}, j^{sa}} &= \sum_{k=l} \sum_{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\ &\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \end{aligned}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n - j_{ik})}^{(n_i - \mathbb{k} + 1)} \frac{\binom{n_i - \mathbb{k} + 1}{n_i - \mathbb{k} - j_{ik}}}{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(n_i - l - 1)!}{(n_i + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(n_i - l_i)!}{(D + j^{sa} + n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s = D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - j_{sa}^{ik} \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > n \wedge$

$j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$j_{sa}^{ik} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_i + j_{sa} - l - s + 1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_i - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_i - l - j_{sa} - s)!}{(l_i - j^{sa} - n - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \\
 & \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$l_i \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \dots$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{ik} = n_{ik} - j_{ik} + 1)}^{(n_{ik} + j_{ik} - \mathbb{k}_2)} \sum_{(n_{sa} = n - j_{sa} + 1)}^{(n_{sa} - j_{ik} + 1)}$$

$$\frac{(n_{ik} - j_{ik} - \mathbb{k}_1 + 1)! \cdot (n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

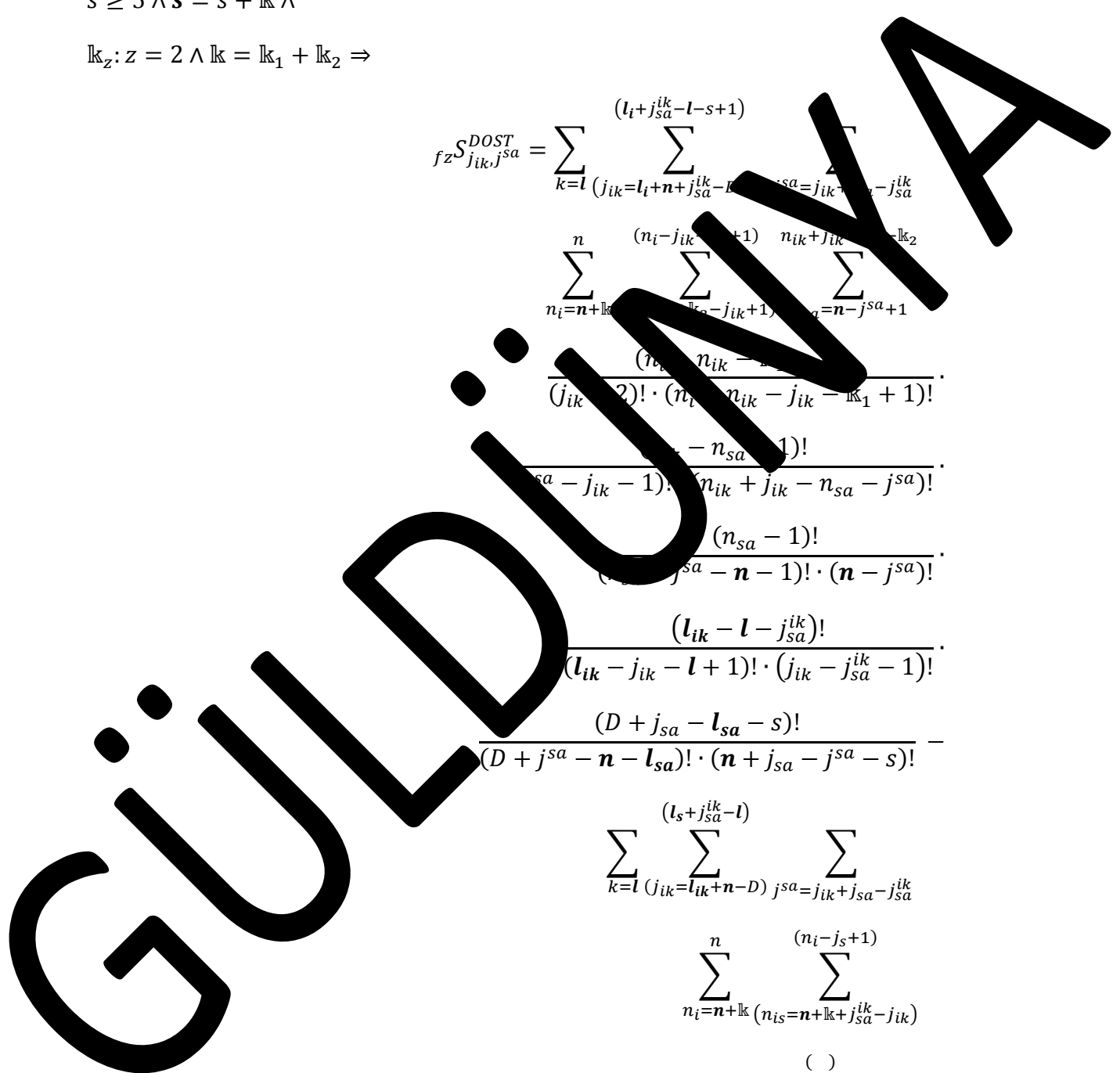
$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{is} = n + \mathbb{k}_1 + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z \geq 2 \wedge k = k_1 \vee k_2 \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_s + j_{sa} - l} j^{sa} = l_{sa} + n - D$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l) - l + 1} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D) - l + 1}^{(l_s + j_{sa}^{ik} - l) - l + 1}$$

$$\sum_{n_i = n + k_1}^n \sum_{(n_i - j_{ik} - k_1) - j_{ik} + 1}^{(n_i - j_{ik} - k_1) - j_{ik} + 1} \sum_{(n_{ik} + j_{ik} - k_2) - j_{sa} + 1}^{n_{ik} + j_{ik} - k_2}$$

$$\frac{(n_{ik} - n_{ik} - k_1)!}{(j_{ik} - k_1)! \cdot (n_{ik} - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}$$

$$\sum_{n_i = n + k_1}^n \sum_{(n_{is} = n + k_1 + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{()}$$

GÜLDENWA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1, j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s: 5 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{j_{ik} - j_{sa} - 1} \sum_{j_{sa}=j_{ik} + j_{sa} - j_{sa}}^{j_{sa} - j_{ik} - 1} \frac{n!}{n_i = n + \mathbb{k}_1} \frac{(j_{ik} - 1)!}{n_{ik} = n + \mathbb{k}_2} \frac{(j_{ik} - j_{sa} - \mathbb{k}_2)!}{n_{sa} = n - j^{sa} + 1} \cdot \frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - j_{sa})! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{ik}=l_i + n + j_{sa}^{ik} - D - s}^{j_{ik} - j_{sa} - 1} \sum_{j_{sa}=j_{ik} + j_{sa} - j_{sa}}^{j_{sa} - j_{ik} - 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

GÜLDENWA

$$\sum_{n_{ik}=n_i+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_1 + z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z^{\mathcal{S}^{DOST}}_{j_{ik}, j^{sa}} = \sum_{k=l}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_s+j_{sa}-l} \sum_{j^{sa}=j_{sa}+1}^{n} \frac{(n_i - j_{ik} - \mathbb{k}_1 + 1)}{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)} \frac{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}{n_{sa} = n - j^{sa} + 1} \cdot \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = l_s + j_{sa}^{ik} - l + 1}$$

$$\sum_{n_i = n + k_1}^n \sum_{n_{ik} = n_i - j_{ik} + 1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_{ik} - n_{sa} - k_1)!}{(j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{j_{sa} = j_{sa}^{ik} - j_{sa}}^{l_s + j_{sa} - l} \sum_{j^{sa} = j_{sa} + 1}$$

$$\sum_{n_i = n + k_1}^n \sum_{n_{is} = n + k_1 + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{()} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}$$

GÜLDENWA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\begin{aligned}
 & \left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{sa} + 2}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \right. \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}} \sum_{n=n+l_k}^n \sum_{(n_{is}=n+l_k)}^{(n_{i_s}+1)} \sum_{(n_{i_s}=n+l_k)}^{(n_{i_s}+1)} \sum_{(n_{i_s}=n+l_k)}^{(n_{i_s}+1)} \sum_{(n_{i_s}=n+l_k)}^{(n_{i_s}+1)} \frac{(n_{i_s} - s - k_1 - k_2)!}{(n - s - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(j_{sa} - l - 1)!}{(j_{sa} - j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(j_{sa} - l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$
- $j_{ik}^{ik} \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + \dots \leq j_{sa} \leq j_{sa} + j_{sa}^{ik} - s \wedge$
- $l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $l_{sa} \leq D + j_{sa} - n \wedge$
- $D > l \wedge n \wedge I = k > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
- $s \in \{j_{sa}^{sa}, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$
- $s \geq 5 \wedge s = s + k \wedge$
- $k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_{ik} j_{sa}}^{DOST} = & \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\
 & \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_s+j_{sa}-j_{sa}-1} \sum_{j_{sa}=j_{sa}+2}^{l_s+j_{sa}-l} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
 \end{aligned}$$

GÜLDEN

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - k_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{()}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-1)}$$

$$\sum_{n+l}^{(n_i-n_{ik}-k_1+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-n_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

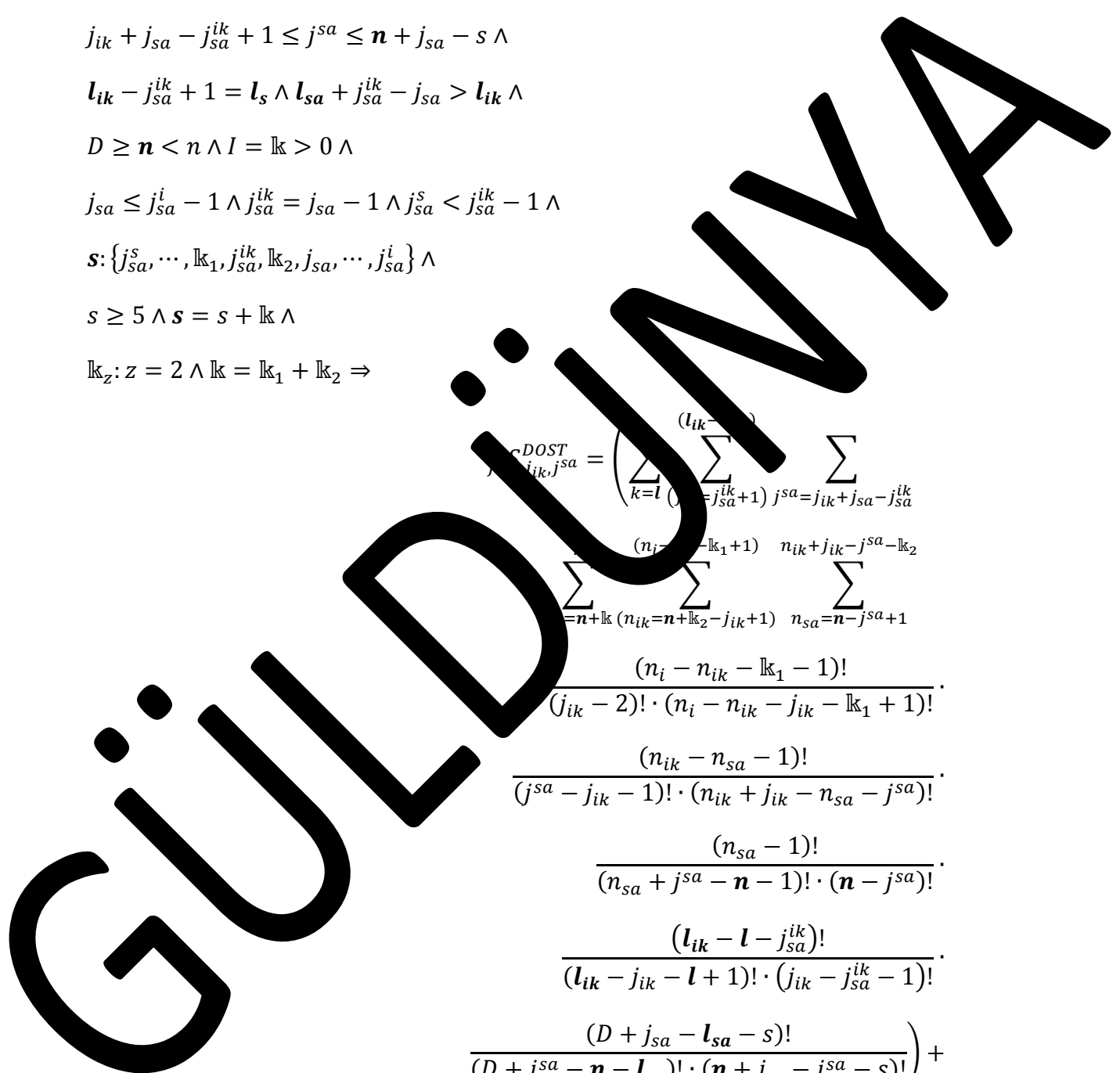
$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \right)$$



$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \left(\frac{(D - j_{sa} - l_{sa} - s)!}{(n + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l-1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOST} = \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{l_{sa} - l + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{l_{sa} - l + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \right)$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - n_{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j^{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_i - j_{sa} - 1)! \cdot (D + j^{sa} - n - l_i - j_{sa} - s)!} \cdot \sum_{k=j_{sa}^{ik}+1}^{j_{sa}^{ik}-l} \sum_{l_{ik}=j_{sa}^{ik}+1}^{j_{sa}^{ik}-l} \sum_{n_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$n \geq n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

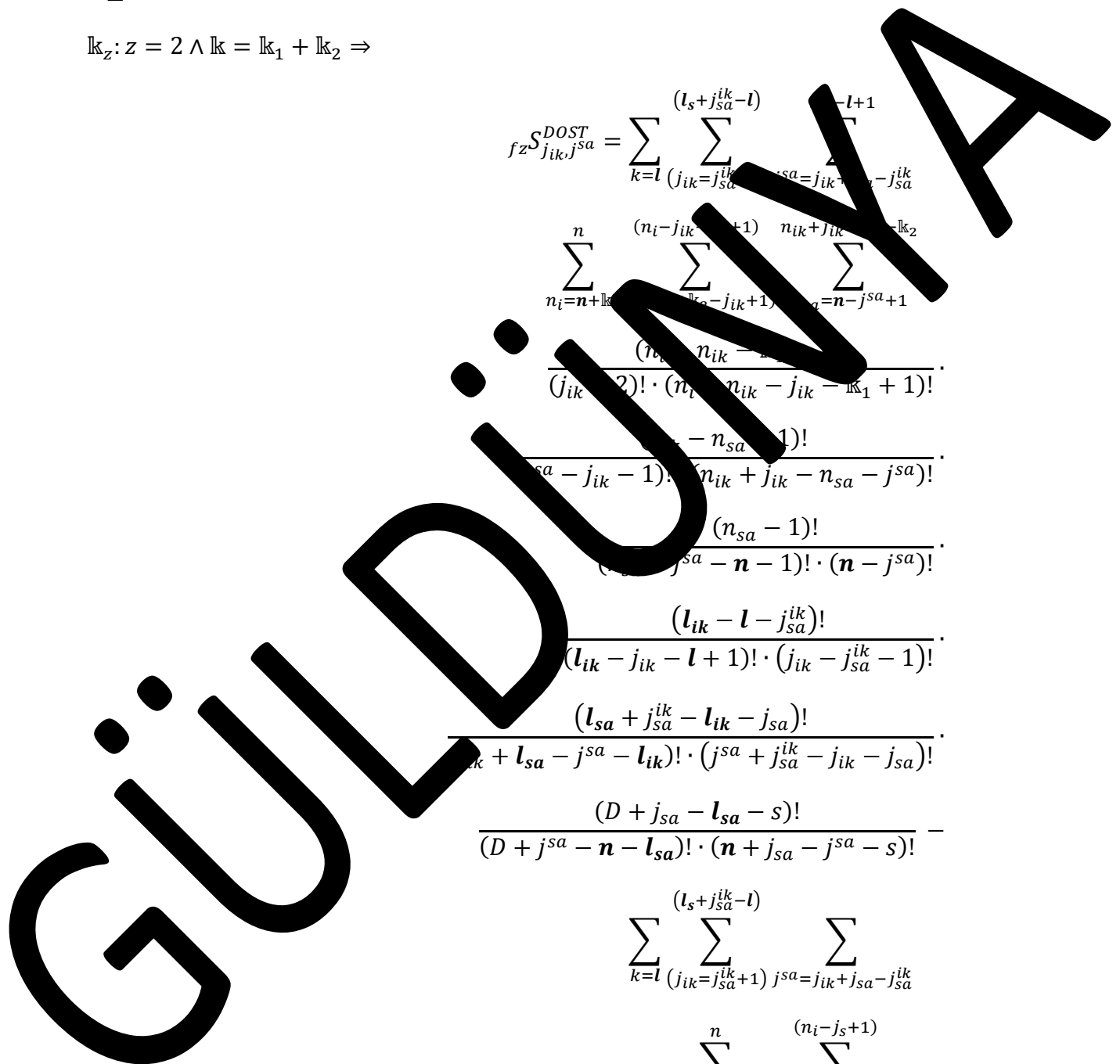
$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} - j_{sa} + j_{ik} - j_{sa}^{ik} - l + 1)} \sum_{(n_i = n + \mathbb{k}_1)}^n \sum_{(n_{is} = n + \mathbb{k}_1 + j_{sa}^{ik} - j_{ik})}^{(n_i - j_{ik} + 1)} \sum_{(n_{sa} = n - j_{sa} + 1)}^{(n_{ik} + j_{ik} - \mathbb{k}_2)} \frac{(n_{ik} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - \mathbb{k}_1 + 1)! \cdot (n_{sa} - 1)! \cdot (n_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})! \cdot (n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})! \cdot (l_{ik} - l - j_{sa}^{ik})! \cdot (l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)! \cdot (l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}$$



$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \dots + \mathbb{k}_2 \Rightarrow$$

$$f_{ik, j_{sa}^{DOST}} = \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{(n_i=n+\mathbb{k})} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik}} \sum_{j^{sa} = l_{sa} + n - D}^{n_{ik} + j_{sa} - l - j_{sa}^{ik}} \right. \\
 & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{sa} - l - j_{sa}^{ik}} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 & \left. + \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right) \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{sa} - l - j_{sa}^{ik}} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(l_{ik}=l_{i}+n+j_{sa}-D-j_{sa}^{ik}+1)}^{()} \sum_{(j_s+1)}^{()} \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$D + l_{sa} + j_{sa} - j_{sa}^{ik} + 2 \leq l \leq i - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

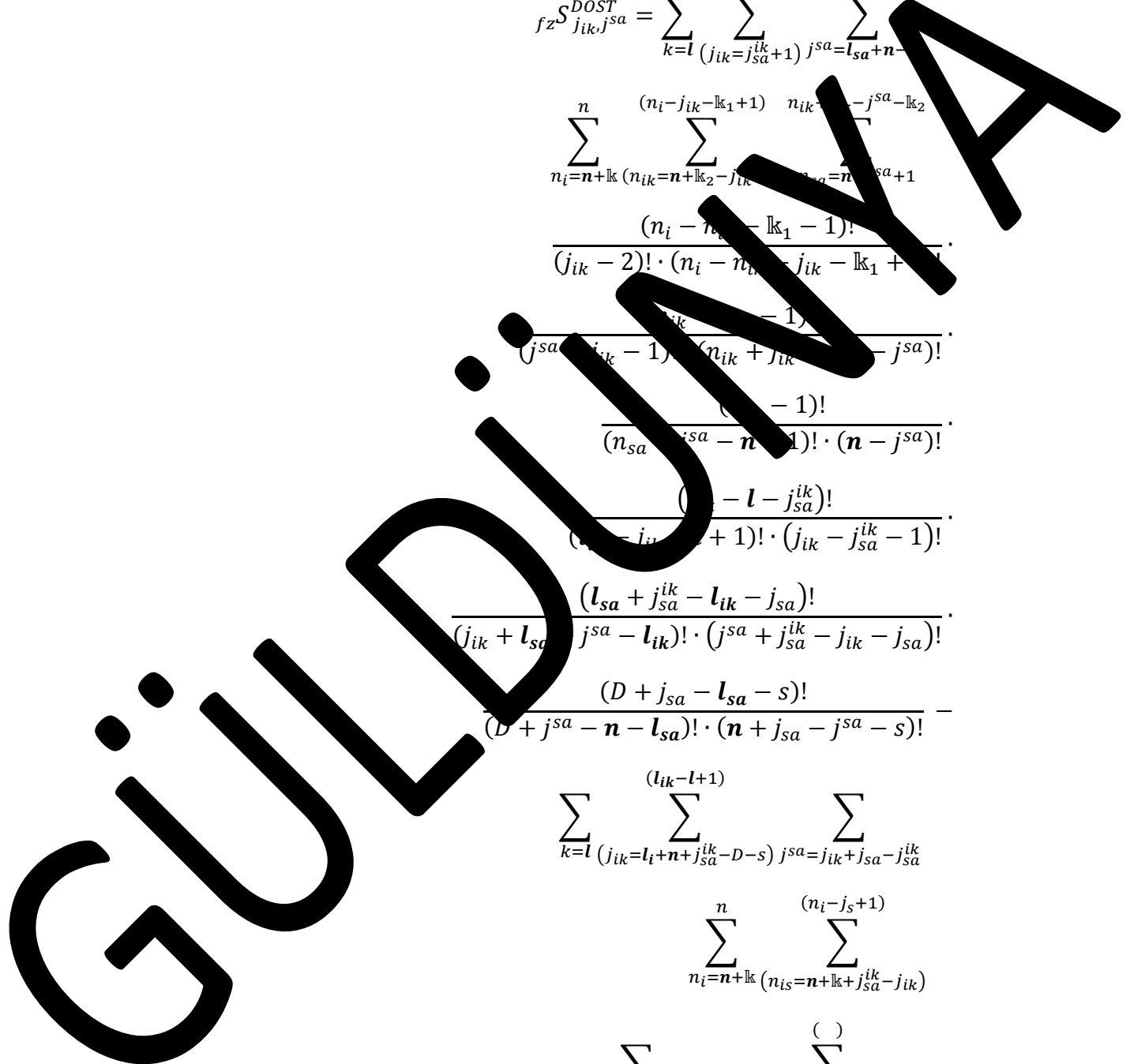
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f_{z} S_{j_{ik} j_{sa}}^{DOST} &= \sum_{k=l}^{(\mathbb{l}_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik})}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n+\mathbb{k}_1-j_{sa}+1)}^{(n_{ik}+j_{sa}-j_{sa}^{ik}-\mathbb{k}_2)} \\ &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ &\frac{(n_{ik} + j_{sa} - j_{sa}^{ik} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(n_{sa} + j_{sa} - n - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ &\frac{(n - l - j_{sa}^{ik})!}{(n - j_{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot j_{sa}^{ik} \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\ &\sum_{k=l}^{(\mathbb{l}_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(\mathbb{l}_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\ &\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(\quad)} \\ &\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \end{aligned}$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{\binom{()}{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa} = l_{sa} + n - D \right)$$

$$\sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_{ik}-k_1+1)}{(n_{ik}=n+k_2-j_{ik}+1)}} \sum_{\binom{n_{ik}+j_{ik}-j^{sa}-k_2}{n_{sa}=n-j^{sa}+1}} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

GÜLDENWA

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{\binom{()}{l_s - l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(n_i - j_s)}$$

$$\sum_{(n_i - j_s)}^{(n_i - j_s)}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1})}^{(n_{ik}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}$$

$$\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

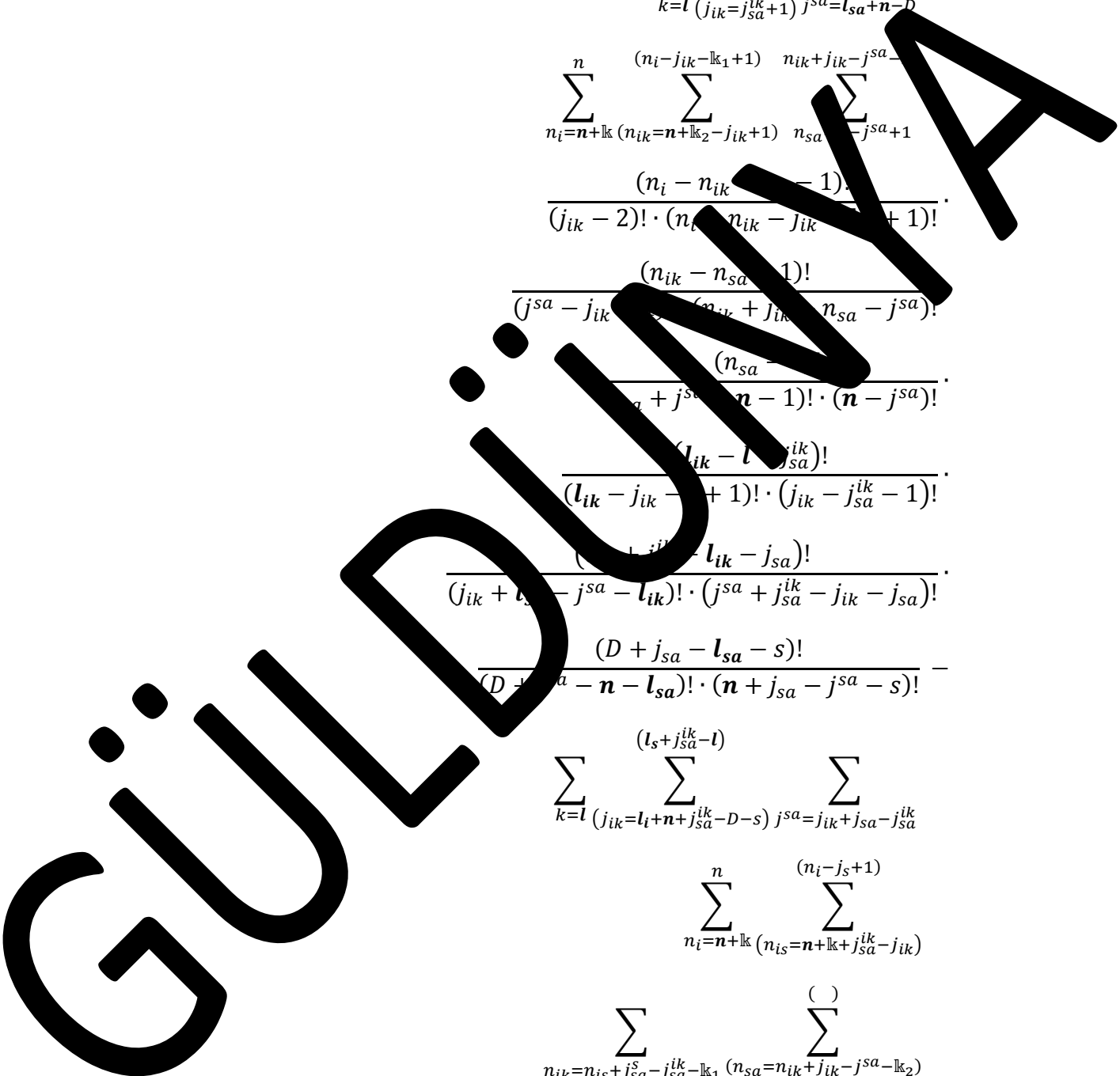
$$\frac{(D - l_i)!}{(D + j^{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l = l \wedge l_s \leq D - n - 2 \wedge$
- $D + l_{sa} + j_{sa} - n - l_{ik} - j_{sa}^{ik} + 2 \leq l \leq l - 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 = j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $j_{sa}^{ik} - j_{sa} < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$
- $D \geq n < n \wedge l = l > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}^{n} \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(j_{ik} + l_{sa} - j^{sa} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - \mathbb{k}_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{l=1}^{(l_{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l)} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

GÜLDEN

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n; n+l}^n \sum_{(n_{is}=n+l-k)}^{(n_{is}+1)} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-k_1-k_2)}^{(n_{ik})} \sum_{(j_{sa}^{ik}-k_2)}^{(j_{sa}^{ik}-k_2)} \frac{(n_{ik}-s-k_1-k_2)!}{(n_{ik}-k_2)! \cdot (n-s)!} \cdot \frac{(j_{sa}^{ik}-l-1)!}{(j_{sa}^{ik}-j_{sa}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_{ik}-l)!}{(D + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $D \geq n < n \wedge l = 1 \wedge l_s \leq D - n - 1 \wedge$
- $2 \leq l \leq D - l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_s \leq j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$
- $D \geq n < n \wedge l = k > 0 \wedge$
- $j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$
- $s \geq 5 \wedge s = s + k \wedge$
- $k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_{ik}, j^{sa}}^{DOST} = & \left(\sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
 \end{aligned}$$

GÜLDEN

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$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n+l_{k_2}-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-1)}$$

$$\sum_{n+l}^{(n_i-l-k_1+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-l-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

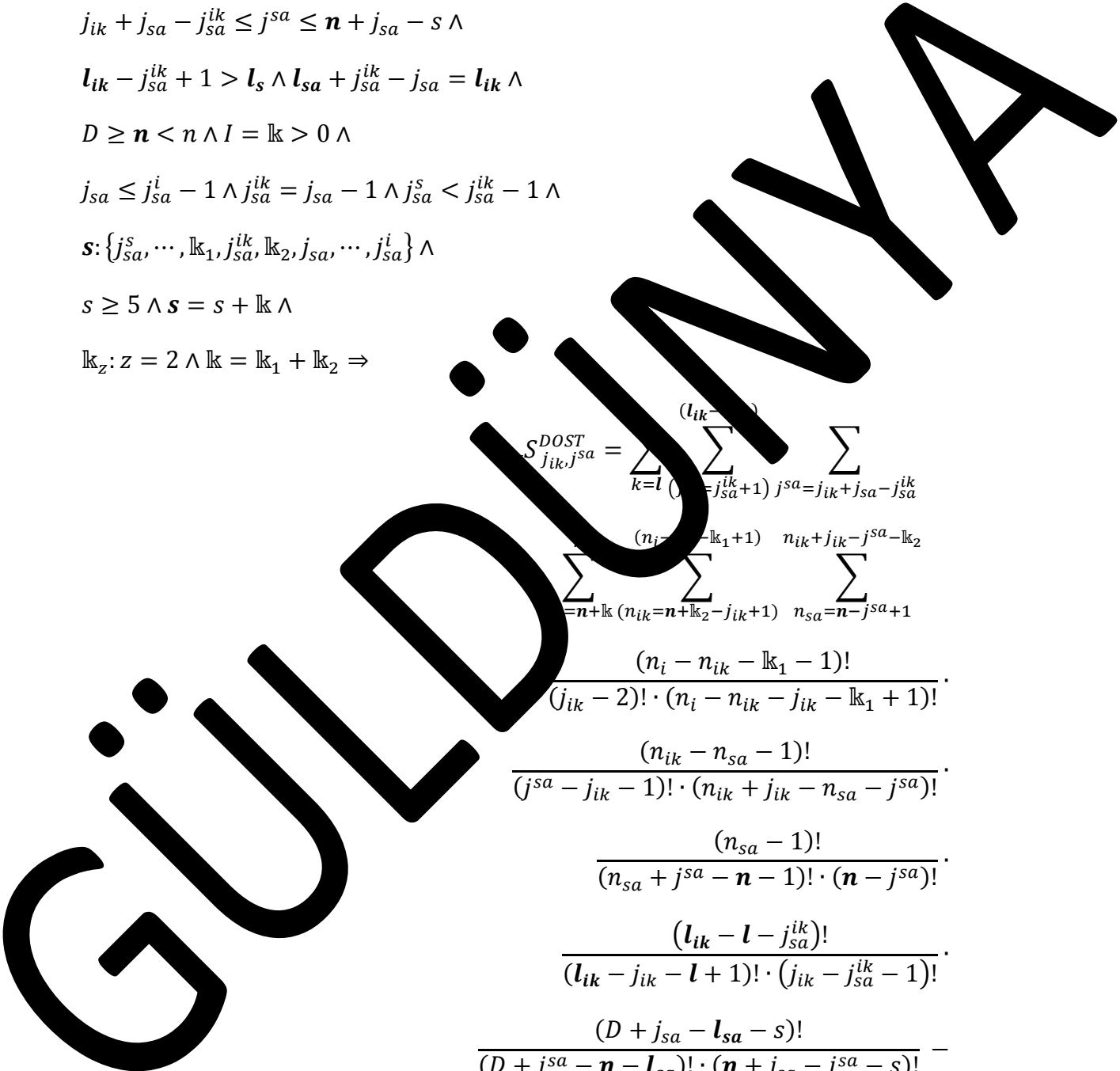
$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa}^{ik})! \cdot (n - j_{sa}^{ik} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq n + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}^{ik}, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = 1, \dots, \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{ik}}}^{DOST} = \sum_{k=l}^{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=1}^{(l_s + j_{sa}^{ik})} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{(n_{is} + k)} \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})} \sum_{(j_s = j_s + 1)}$$

$$\sum_{(n_{is} + j_{sa}^s - j_{sa}^{ik} = k_1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - l_{sa})} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik} + j_{sa} - s + 1} \sum_{n_i = n + k}^{n_i = n + k_2 - j_{ik} + 1} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{sa} = n - j_{sa} - k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{n} \sum_{n_i = n + k}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(\cdot)} \sum_{(j_{ik}=j_{sa}^{ik}-j_{sa})}^{(\cdot)} \sum_{l_{ik}+j_{sa}^{ik}+1}^{(\cdot)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D > n) \wedge n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOS1} = \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{(l_i+n+1 \leq l \leq D-s-1)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)} \sum_{(j_{sa}^{ik}=j_{sa}-1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \sum_{(n_{sa}=n-j_{sa}+1)} \sum_{(j_{ik}=\mathbb{k}_1+1)} \sum_{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

GÜLDÜZMÜNYA

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik})!} \cdot \\
 & \frac{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik})!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(n_{ik}-l+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})}^{(n_{sa}-l+1)} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!}
 \end{aligned}$$

GÜLDENWA

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} - j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{(n_i - j_{sa}^{ik} + 1)} \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_i - n_{ik} - k_1 + 1)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_i + j_{sa} - l - s + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n - n_{sa} - 1)!}{(n + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l_{sa} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_i + n + j_{sa} - D - s} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)} \\
 & \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDEN

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{sa}^{ik}}^{DOST} = \sum_{k=l}^{n+j_{sa}^{ik}-D-s+1} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}^{ik}-s+1} \sum_{j=l_i+n+j_{sa}-D-s}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i - n_{sa} - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\quad)} \\
 & \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDENWA

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz_{k_1, j_{sa}}^{DOST} = \sum_{k=l}^{\binom{D+l_{ik}+j_{sa}-j_{sa}^{ik}+1}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}=j_{sa}+1}^{\binom{l_{ik}+j_{sa}-j_{sa}^{ik}+1}{j_{sa}^{ik}+1}} \sum_{n_i=n+k}^{\binom{n_i-j_{ik}-k_1+1}{n_{ik}=n+k_2-j_{ik}+1}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{n_{ik}+j_{ik}-j_{sa}-k_2}{n_{sa}=n-j_{sa}+1}} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{D+l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}=j_{sa}+1}^{\binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}^{ik}+1}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i - j_{sa} - s > 0 \wedge$

$D + s - n < l_i \leq D + l_{sa} - s - n - j_{sa} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}^{ik}, j_{sa}^i\} \wedge$

$s \geq 1 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}, j^{sa}=l_i+n+j_{sa}-D-k+1)}$$

$$\sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}$$

$$\sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq l \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D - s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

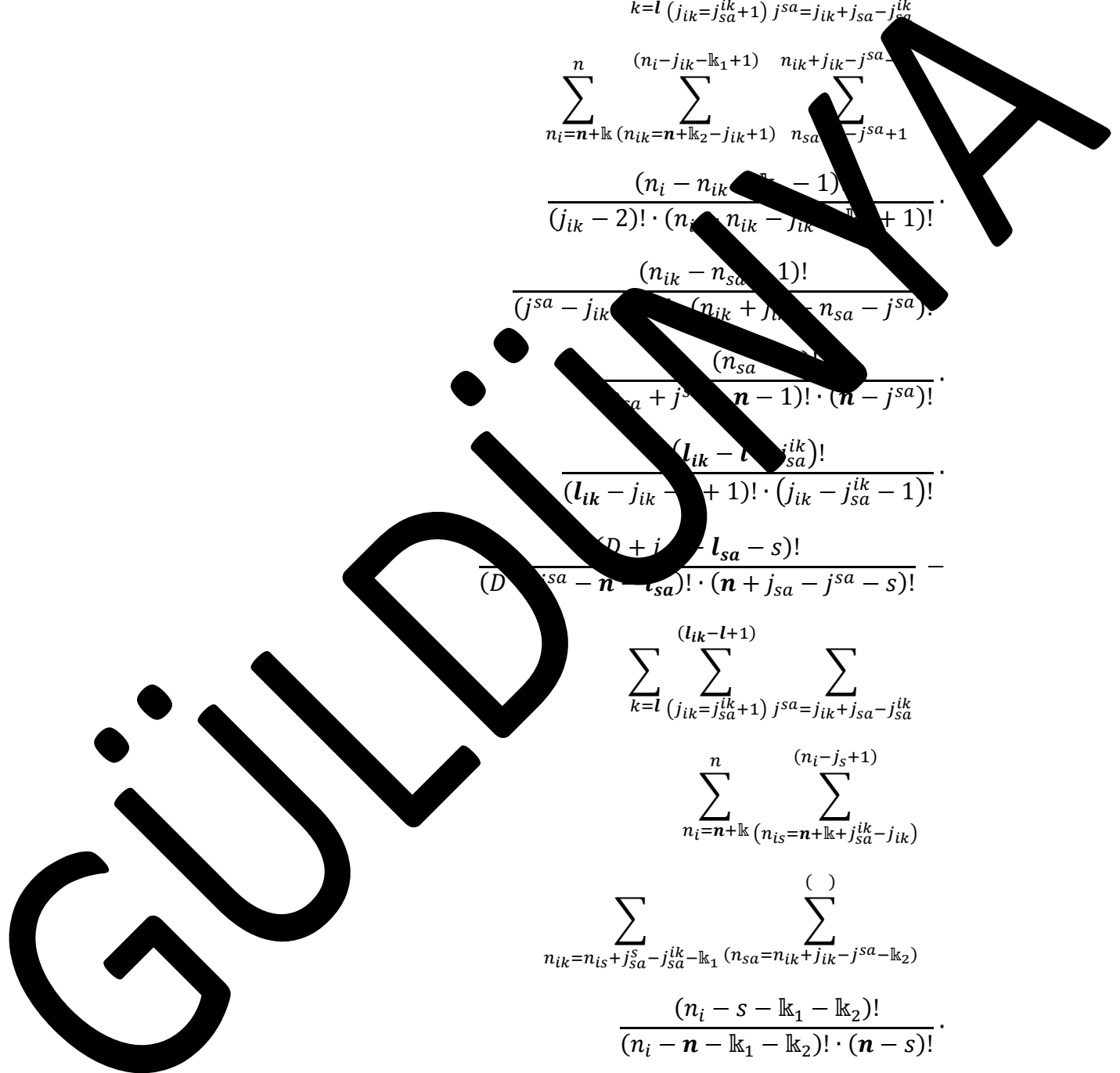
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j^{sa}} \\
 &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 &\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \\
 &\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 &\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$



$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(n-j_{sa}^{ik}-k_1+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_i=n+k}^{(n_{ik}=n+k_2-j_{ik}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{sa}-1)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

GÜLDÜNKYA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l - l_i - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i - j_{sa} - s > 0 \wedge$

$D + s - n < l_i \leq D + l_s - s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}^{ik}, j_{sa}^i\} \wedge$

$s \geq 1 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z^{S_{j_{ik}, j_{sa}^{DOST}}} = \sum_{k=l}^{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-l_{sa})} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_s+1)} \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_i - s - k_1 - k_2)!} \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{n_i = n + \mathbb{k}}^{\sum_{(n_{ik} = j_{sa}^{ik} + 1)}^{(j_{sa}^{sa} + \mathbb{k} - j_{sa}) l_{ik} + j_{sa}^{ik} + 1}} \sum_{n_{sa} = n - j_{sa} + 1}^{\sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{j_{sa} = j_{sa} + 1}} \sum_{n_{sa} = n - j_{sa} + 1}^{j_{sa} = j_{sa} + 1} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{n_{sa} = n - j_{sa} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n_{sa} + j_{sa}^{ik} - j^{sa} - s)!} \cdot \sum_{k=l}^{n_{ik} + j_{sa}^{ik} - j_{sa}^{ik}} \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{n_{ik} + j_{sa}^{ik} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - \mathbb{k}_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n - n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}+1}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k_2)} \frac{(n_i-s-k_1-k_2)!}{(n_i-n-k_1-k_2)! \cdot (n-s)!} \cdot \frac{(l_s-l+1)!}{(l_s+j_{sa}-j_{sa}^{ik}-l)! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \frac{(D-n)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n - l_i \leq D + l_s + s - n - 1)$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n - l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$l_i \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik})! \cdot (l_{ik} - j_{sa})!}{(l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1}$$

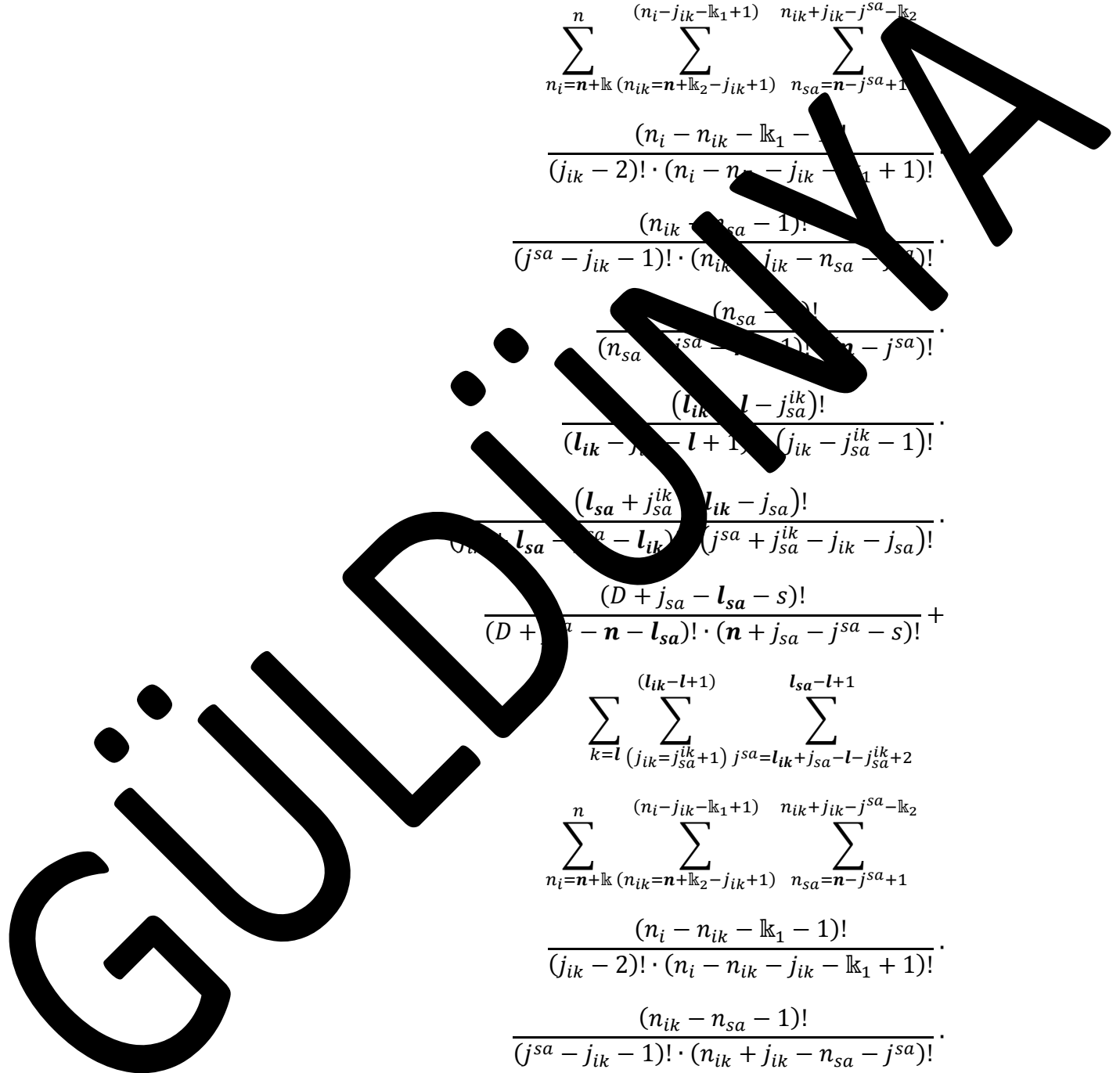
$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}^{(n_i+1)}$$

$$\sum_{n_i=n+l}^{n} \sum_{(n_{is}=n+l-k)}^{(n_i+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-k_1}^{(\quad)} \sum_{(n_{ik}-j^{sa}-k_2)}^{(\quad)} \frac{(n_{ik}-s-k_1-k_2)!}{(n_{ik}-k_1-k_2)! \cdot (n-s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot (D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_{sa} \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}^{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!}$$

$$\frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}-j_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j_{sa}^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!}$$

GÜLDÜSÜYA

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa})} \sum_{(j_{sa}=j_{sa}-j_{sa})} \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq l_i < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

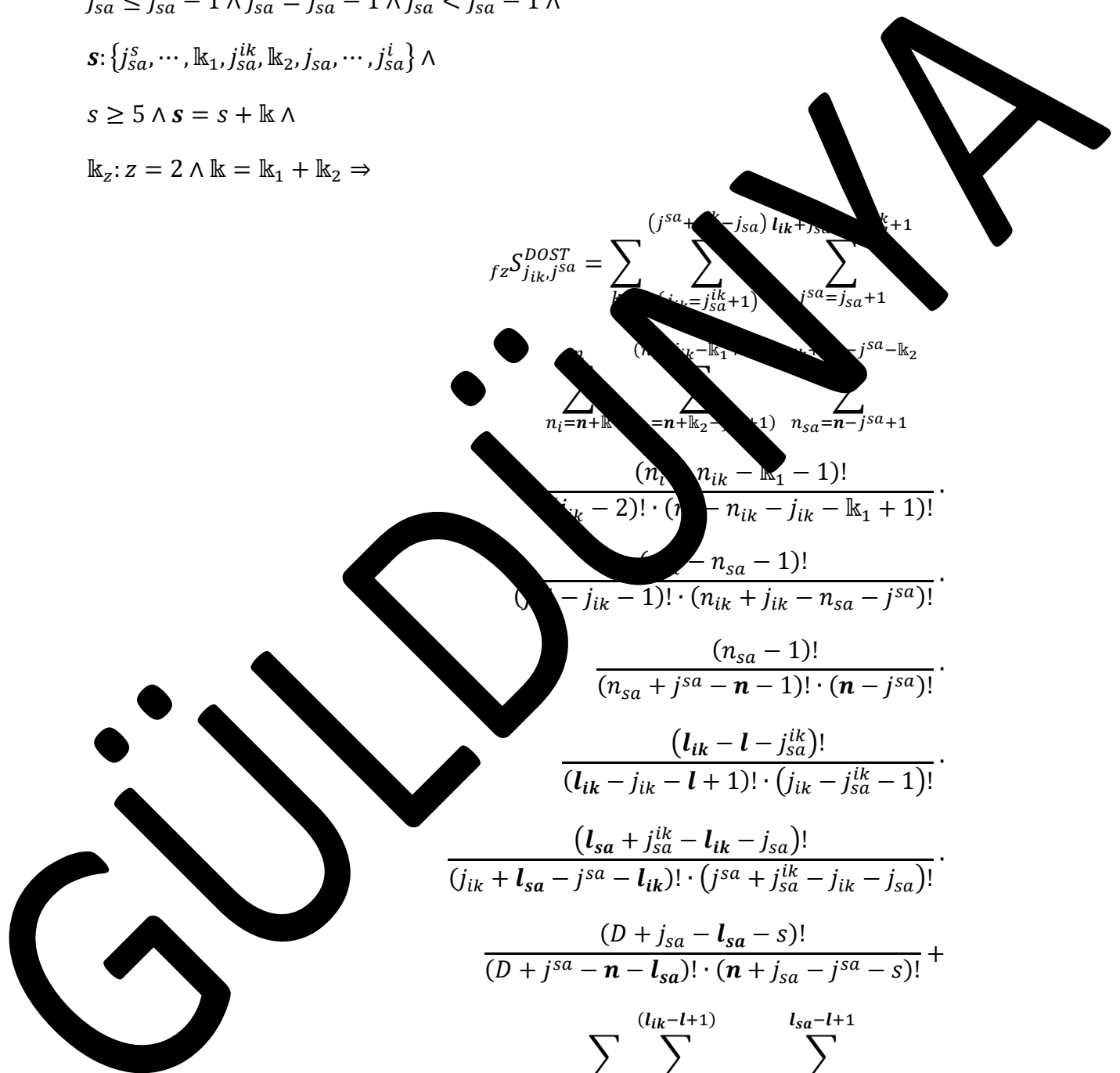
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_{ik}-\mathbb{k}_1-j_{ik}+1)} \sum_{(j_{sa}^{ik}=j_{sa}+1)}^{(j_{sa}+l_{ik}-j_{sa})} \sum_{j_{sa}=j_{sa}+1}^{j_{sa}+l_{ik}+j_{sa}-\mathbb{k}+1} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$



$$\begin{aligned}
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=0}^{j_{sa}^{ik} - j_{sa}^{ik} + 1} \sum_{l=0}^{j_{sa}^{ik} - j_{sa}^{ik} + 1} \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{j_{sa}^{ik} - l} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(j_{sa}^{ik} - j_{sa}^{ik} - 1)} \\
& \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i! \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

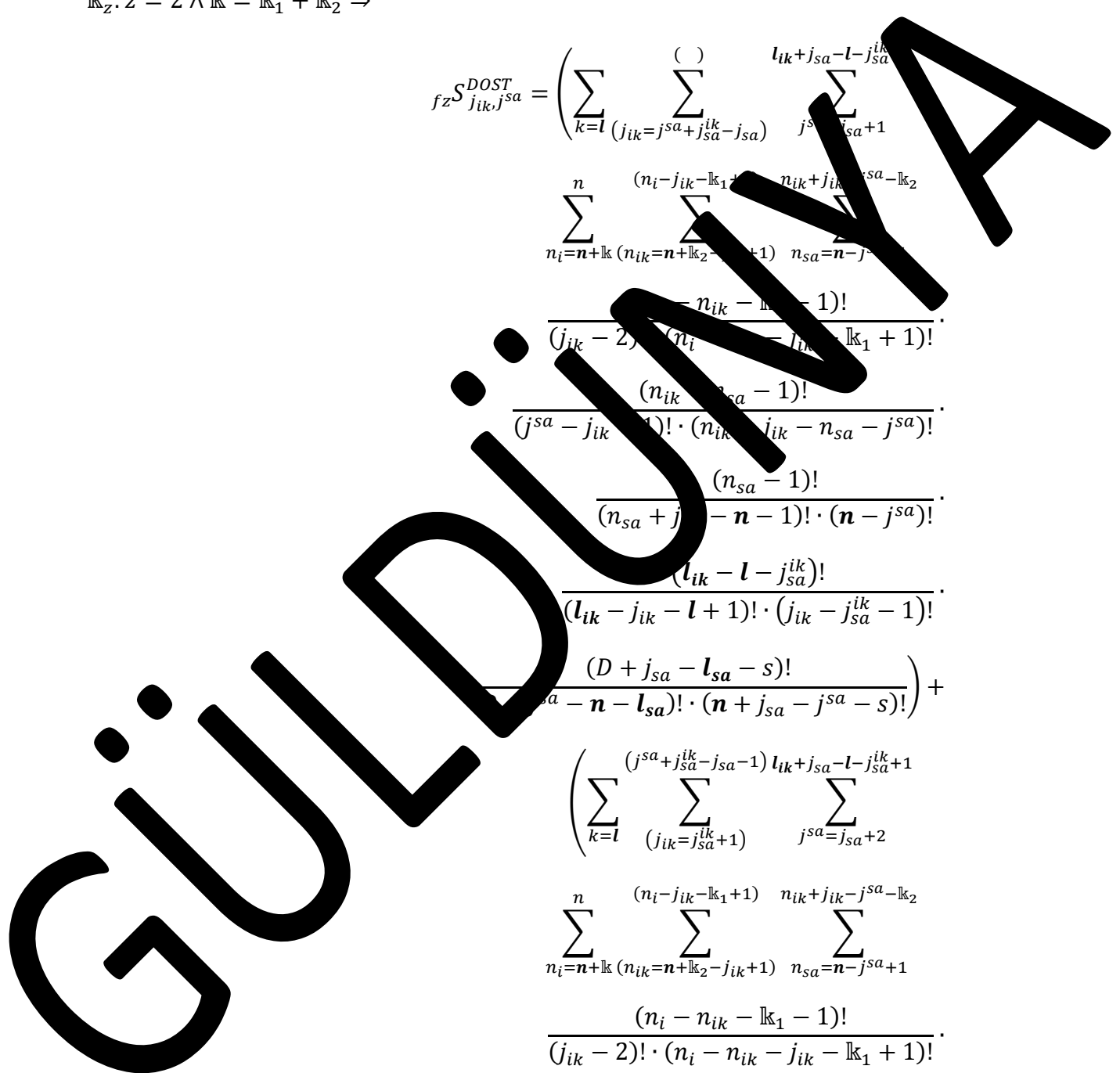
$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik})} \sum_{(j_{sa}^{sa+1})} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n-j_{sa}^{sa}-\mathbb{k}_2)}^{(n_{sa}=n-j_{sa}^{sa}-\mathbb{k}_2)} \frac{(n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}^{sa}-n-1)! \cdot (n-j_{sa}^{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(j_{sa}^{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}^{sa}-s)!} \Big) +$$

$$\left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{(j_{sa}^{sa+2})} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}^{sa}+1)}^{(n_{sa}=n-j_{sa}^{sa}-\mathbb{k}_2)} \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}^{sa}-n-1)! \cdot (n-j_{sa}^{sa})!} \Big)$$



$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}+1} \sum_{(j_{sa}+j_{sa}^{ik}-j_{sa}^{ik}+2)}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_{ik}-l_{ik}+1)}^{(n_{ik}+j_{ik}-l_{ik_2})} \sum_{(n_{sa}=n-j^{sa}+1)}$$

$$\frac{(n_{ik} - n_{ik} - j_{ik} - l_{ik_1} + 1)!}{(j_{ik} - l_{ik} - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} - l_{ik_1} + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{ik_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{ik_2})}^{()}$$

GÜLDÜZMAYA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$f_z S_{j_{sa}^{ik}}^{D_0} = \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) + \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned}
 & \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - n_{sa} - s)!}{(D + j_{sa} - n - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\left((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} \sum_{z \in \text{DOST}} j_{ik}, j_{sa}^{ik} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n, n+l}^n \sum_{(n_{is} = n - j_{ik})}^{(n_{is} + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - l_{k_1} - l_{k_2}}^{()} \frac{(n_{ik} - j_{sa} - l_{k_2})!}{(n_{ik} - n - l_{k_1} - l_{k_2})! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i)!}{(D + j_{sa} + l_i - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = 1 \wedge l_s \leq D - n - 1 \wedge$$

$$2 \leq l \leq D - j_{sa} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 \leq l_s \wedge l_s \leq j_{sa} - j_{sa} > l_{ik} \wedge$$

$$D - j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_{ik}, j^{sa}}^{DOST} = & \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
 & \left. \frac{(D + l_{sa} - l_{sa})!}{(D + l_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{lk}+1)}^{(j^{sa}+j_{sa}-j_{sa}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
 & \left. \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \right)
 \end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot$$

$$\frac{(n_{sa} + j_{sa} - n - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik})! \cdot (l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} j^{sa}=l_i+n+j_{sa}-D-s$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j^{sa})!} \\
 & \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

GÜLDÜZ

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa}^{s_a = i + j_{sa} - j_{sa}^{ik}} \sum_{n = n + k}^n \sum_{(n_{is} = n - k)}^{(n_i - k + 1)} j_{ik} \sum_{(n_{ij} = n_{is} + j_{sa}^{ik} - k_1)}^{(n_i - k_1 + 1)} \sum_{(n_{ij} = n_{is} + j_{sa}^{ik} - k_2)}^{(n_i - k_2 + 1)} j_{sa}^{s - k_2} \frac{(n_i - s - k_1 - k_2)!}{(n - k_1 - k_2)! \cdot (n - s)!} \frac{(j_{sa} - l - 1)!}{(j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \frac{(D - l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$
- $j_{ik}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq n + j_{sa} - 1 \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$
- $D + j_{sa}^{ik} - n - l_{ik} \leq D - l_s + j_{sa}^{ik} - n - 1 \wedge$
- $D > n - 1 \wedge I = k > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
- $s \in \{j_{sa}^{ik}, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$
- $s \geq 5 \wedge s = s + k \wedge$
- $k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_{ik} j_{sa}^{sa}}^{DOST} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{sa}}^{n_{ik}+j_{ik}-j_{sa}^{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa}^{sa})!} \cdot \\
 &\frac{(n_{sa} - j_{sa}^{sa} - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa}^{sa})!} \cdot \\
 &\frac{(l_{ik} - j_{ik} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{sa} - 1)!} \cdot \\
 &\frac{(D - j_{sa} - l_{sa} - s)!}{(D - j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa}^{sa} - s)!} \cdot \\
 &\sum_{k=l}^{(l_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^{sa}-j_{sa}^{ik}-l_{k_1}}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-l_{k_2})} \sum_{(j_{sa}^{sa})} \\
 &\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{(l_i+l_{sa}-l-s+1)}^{(\quad)} \sum_{(j_{sa}-D-s)}^{(\quad)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik})!}$$

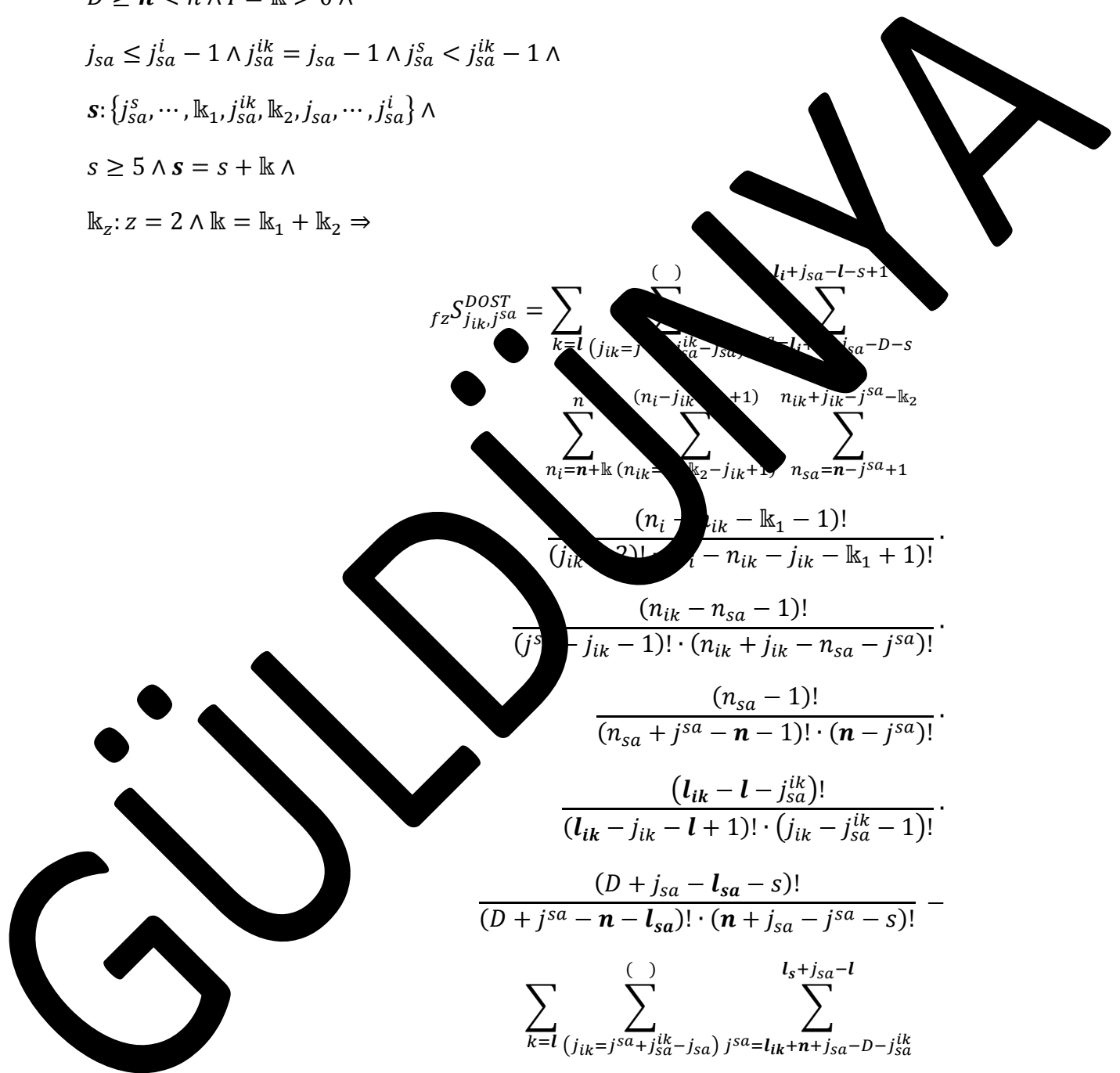
$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(l_s+j_{sa}-l)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = j_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1$$

$$\mathbb{k}_1 + z = 2 \wedge \mathbb{k}_1 = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n, n+k}^n \sum_{(n_{is} = \dots)}^{(n_i + 1)} \dots (j_{ik})$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1} \dots \sum_{(n_{ik} - j_{sa} - k_2)} \dots \frac{(n - s - k_1 - k_2)!}{(n - k_2)! \cdot (n - s)!}$$

$$\dots \frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\dots \frac{(l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - j_{sa}^{ik}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n - l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D > n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{l_s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{sa} - l_{ik} - j_{sa}^{sa})!}{(j_{ik} + j_{sa}^{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa}^{sa} - l_{sa} - s)!}{(D + j_{sa}^{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_i+j_{sa}-l-s+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=l_{sa}+n-l}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l}^n \sum_{(n_i \geq l_s + j_{sa} - j_{ik})}^{(n_i - l_s + 1)}$$

$$\sum_{n_{ik}=n_i+j_{sa}-l_{sa}-l_{ik}}^{(\quad)} \sum_{(n_{ik} \geq j_{sa}-l_{k_2})}^{(\quad)} \frac{(n - s - l_{k_1} - l_{k_2})!}{(n - l_{k_1} - l_{k_2})! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i - l)!}{(D + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - j_{sa}^{ik}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - l_{sa} < l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D > n \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \geq 5, \{l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_{ik} j_{sa}}^{DOST} = & \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa}^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{sa} - l_{ik} - j_{sa}^{sa})!}{(j_{ik} + j_{sa}^{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa}^{sa} - l_{sa} - s)!}{(D + j_{sa}^{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa}^{sa} - s)!} + \\
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa}^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n, n+k}^{(n_i + 1)} \sum_{(n_{is} = n + k)} (j_{ik})$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1}^{(n_{ik} - j_{sa} - k_2)} \frac{(n_{ik} - s - k_1 - k_2)!}{(n_{ik} - n - k_1 - k_2)! \cdot (n - s)!}$$

$$\frac{(j_{ik} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} - l_i)!} \cdot \frac{1}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_i \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_{sa}-l+} \sum_{j_{sa}^a=j_{sa}+1}^{l_{sa}-l+}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+1)}^{(n_i-j_{ik}-\mathbb{k}_1+)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-j_{ik}-\mathbb{k}_1+1)!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j_{sa}^a=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i-s-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)! \cdot (n-s)!} \cdot \frac{(l_s-l-1)!}{(l_s+j_{sa}^{ik}-j_{ik}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} f_z^{ST} j_{sa}^{ik} &= \sum_{k=l}^n \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-l+1} \\ &\sum_{i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\ &\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\ &\sum_{k=l}^n \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \end{aligned}$$

GÜLDÜNKYA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_i + j_{sa}^{ik} - n - 1) \wedge$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_i + j_{sa}^{ik} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\{s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 &\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 &\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_{ik} - j_{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_{sa} - l - s)!}{(D - j^{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 &\sum_{k=l}^{(l_s + i - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 &\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 &\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{(\quad)} \\
 &\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^k - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2$$

$$f_{z, k, j_{sa}}^{DST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}^{l_s + j_{sa} - l}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = l + j_{sa} - l + 1}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_{sa} = n_i + j_{sa} - j_{ik} - k_2)}^{(n_{ik} + j_{sa} - j_{sa} - k_2)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - j_{sa} - k_1 - 1)! \cdot (n_i - n_{ik} - k_1 + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - j_{ik} - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

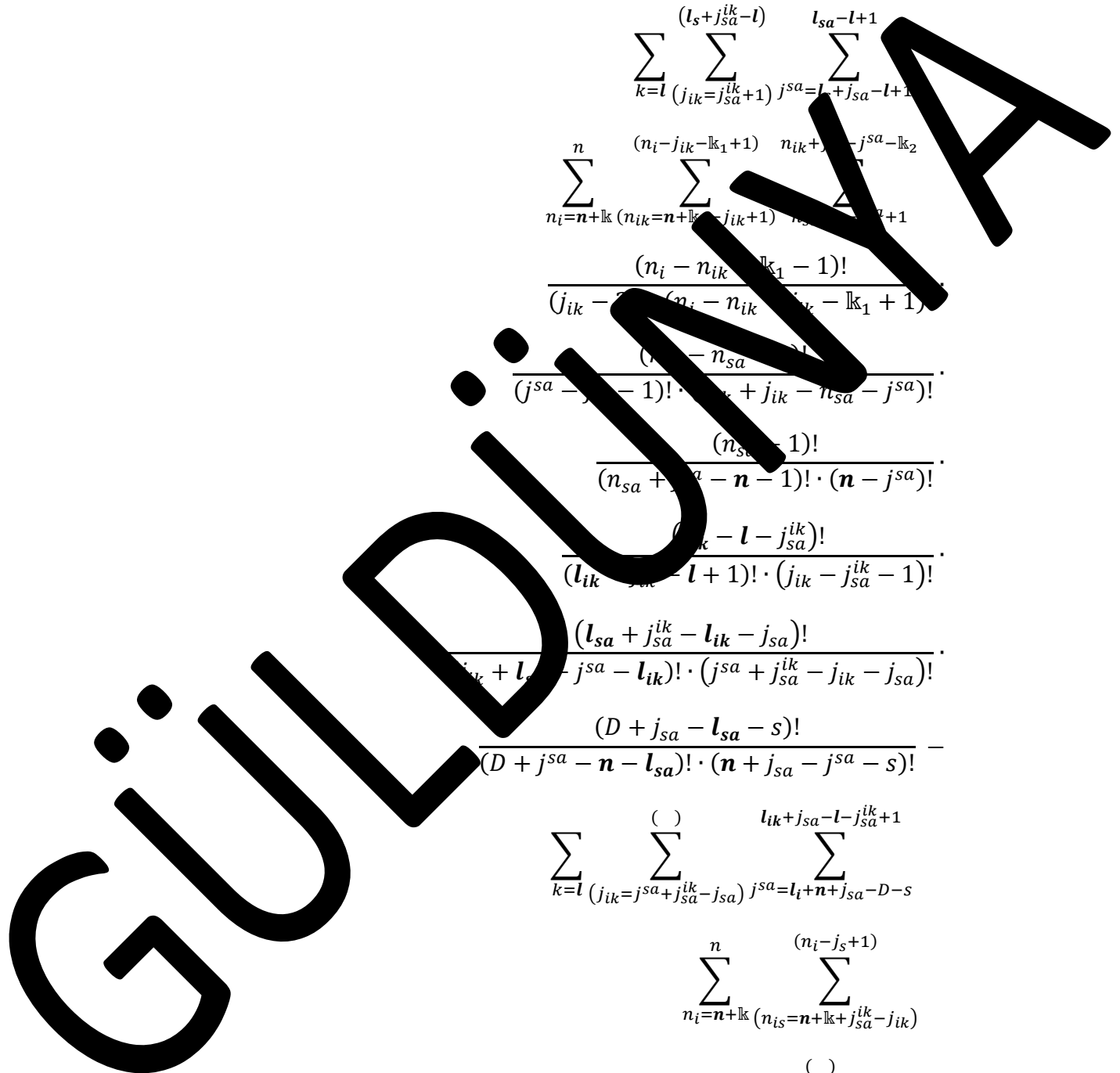
$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})}^{()} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{()}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{k_1}, k_2, j_{sa}^{k_2}, \dots, j_{sa}^{i_k}\} \wedge$$

$$s \geq 1 \wedge s = s + k \wedge$$

$$k_z: z = z + k, k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}^{n} \sum_{(n_i - j_{ik} - k_1 + 1)}^{n_{ik} + j_{ik} - j^{sa} - k_2} \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_i - n_{ik} - k_1 - 1)!} \cdot (j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{k=l}^{(1+j_{sa}^{ik}-l)} \sum_{j_{sa}=l_{sa}+n+...-D-j_{sa}}^{l_{sa}-l+1} j_{sa}^{ik}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_{sa}-j_{ik}+1)}^{(n_i-j_{ik}-l_{sa}-1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k2}}$$

$$\frac{(n_i - n_{ik} - l_{k1} - 1)!}{(j_{ik} - l_{k1})! \cdot (n_i - n_{ik} - j_{ik} - l_{k1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

GÜLDEN

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(\quad)}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i) \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i) \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{ik} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq (l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i) \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i) \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1)} \sum_{l_{ik}+n-D}^{j_{sa}-n-D} \sum_{n_i=n+k}^n \frac{(n_i - j_{ik} - l + 1) \cdot n_{ik} + j_{ik} - j_{sa} - k_2}{(n_{ik} - k_2 - j_{ik} + 1) \cdot n_{sa} = n - j_{sa} + 1} \cdot \frac{(n_i - j_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1}$$

GÜLDÜZÜMÜYÜ

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - j_{sa}^{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j^{sa} - n - s)! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{\binom{D}{l}} \sum_{(j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \\
 & \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$\left((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > \mathbb{k} \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 = \mathbb{k}_1 + 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{l=1}^{(l_{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-j_{sa}}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

GÜLDÜŞÜKA

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - (n_i - j_s + 1))}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - k_2)}^{(\quad)}$$

$$\frac{(n_i - s - k_1)! \cdot (n_i - s - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n_i - s)!}$$

$$\frac{(l_s - l - k_1)!}{(l_s + j_{sa}^{ik} - j_{ik} - k_1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - n - k_1)!}{(D + j_{sa} + s - n - j_{sa})! \cdot (n_i + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - j_{sa} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

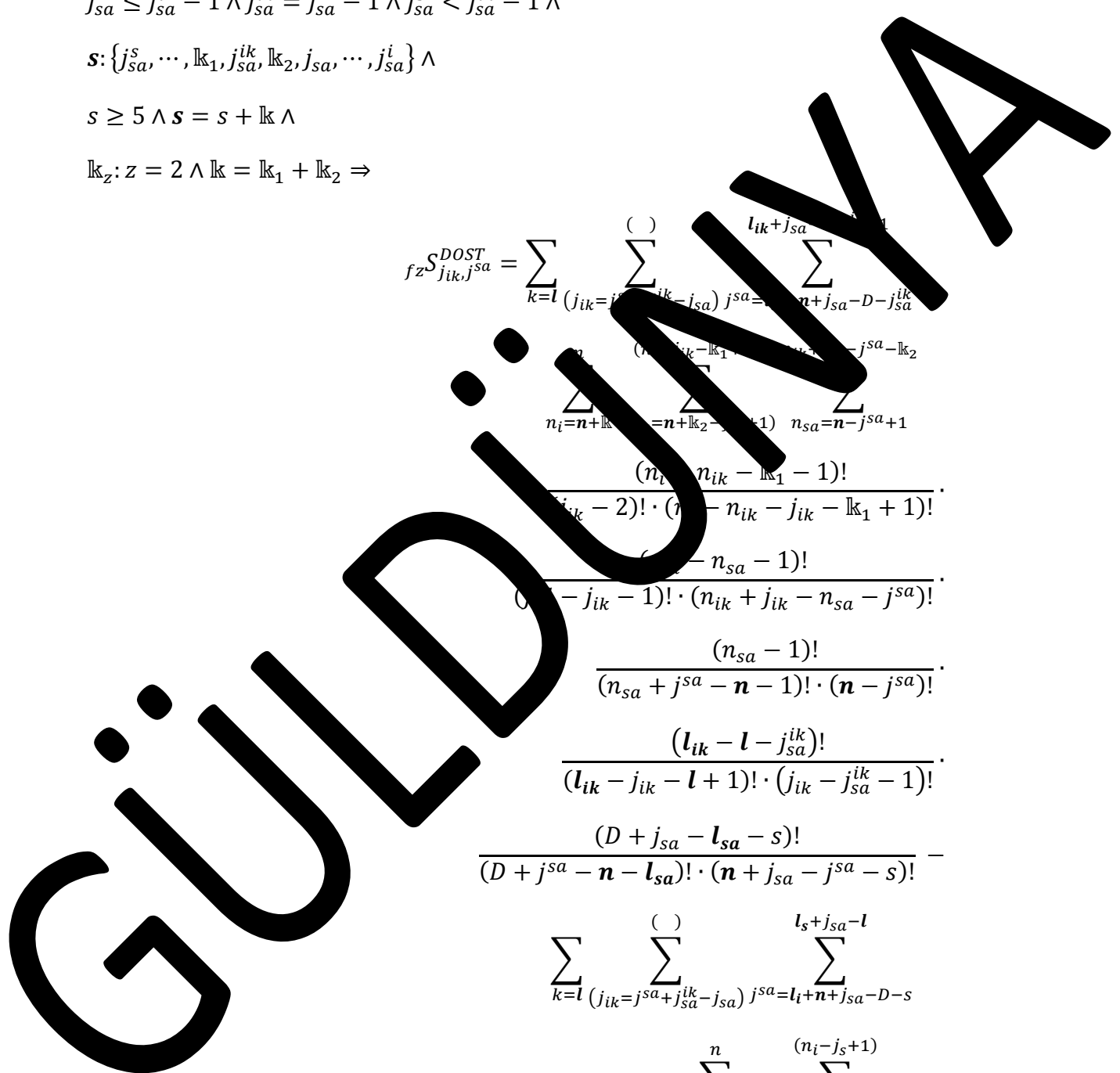
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}} \sum_{n_i=n+k}^{(n_i=j_{sa}-j_{sa}-k_2)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{sa}=n_{ik}-k_1-j_{sa}-k_2)} \frac{(n_i - n_{ik} - k_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(\quad)} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \sum_{n_i=n+k}^n \sum_{n_{sa}=n+k+j_{sa}^{ik}-j_{ik}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2}^{(\quad)}$$



$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s + j_{sa}^{ik} - j_{ik} - \mathbf{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - n - \mathbf{l}_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge \mathbf{l} = \mathbf{l} \wedge \mathbf{l}_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge$$

$$D \geq n < n \wedge \mathbf{l} = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left(\sum_{k=1}^{\binom{()}{\mathbf{l}}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \right) + \frac{(D + j_{sa} - \mathbf{l}_{sa} - s)!}{(D + j_{sa} - n - \mathbf{l}_{sa})! \cdot (n - s)!}$$

$$\begin{aligned}
 & \left(\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{()} l_{sa} - i^{l+1} \sum_{j^{sa}=j_{sa}+1} \right. \\
 & \sum_{n_i=n+l}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa})!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i - j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{()} \sum_{j^{sa}=j_{sa}} \\
 & \sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^n \sum_{l=j_{sa}^{ik}+j_{sa}-j_{sa}^i}^{l_{sa}-i} \sum_{j_{sa}=j_{sa}}^{j_{sa}-i} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{sa}^i+1}^{n_i-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n-j_{sa}^i}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-j_{ik}-\mathbb{k}_1+1)!} \cdot \frac{(n_{ik}-j_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-i-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-i-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}^i-s)!} \cdot \sum_{k=i}^n \sum_{l=j_{sa}^{ik}}^{l_{sa}-i} \sum_{j_{sa}=j_{sa}}^{j_{sa}-i} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i-s-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)! \cdot (n-s)!} \cdot \frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-s)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{\substack{(\cdot) \\ (j_{ik}=j_{sa}+j_{sa}^{ik}) \\ (n_{ik}=n_{ik}-k_1+1) \\ (n_{sa}=n_{sa}-j_{sa}-k_2) \\ n_i=n+k \\ (n_{ik}=n_{ik}-j_{ik}-k_1+1) \\ n_{sa}=n_{sa}+j_{sa}+1}} \sum_{j_{sa}=j_{sa}}^{l+1} \frac{(n_{ik} - n_{ik} - k_1 - 1)!}{(n_{ik} - 2)! \cdot (n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \sum_{k=i}^{(\cdot)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_{ik}-j_{ik}-k_1+1)}^{(\cdot)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!}$$

GÜLDÜZÜMÜYA

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

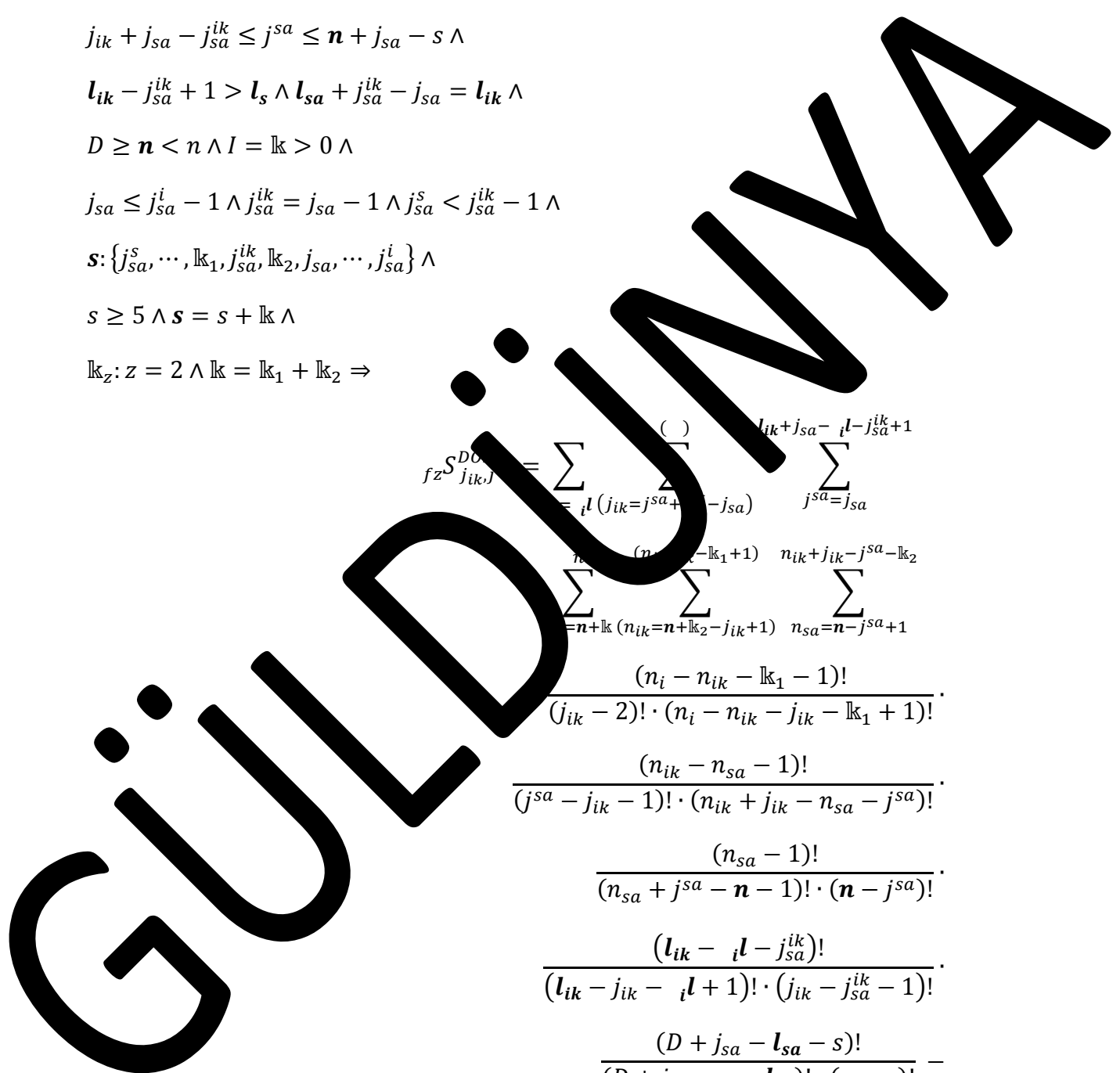
$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j}^{D_0} = \sum_{i^l} \sum_{j_{sa}^{ik}} \sum_{j_{sa}^{ik}} \sum_{j_{sa}^{ik}} \frac{(n_i - n_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=1}^{\infty} \sum_{i^l} \sum_{j_{sa}^{ik}} \sum_{j_{sa}^{ik}}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$fz^{OST} = \sum_{k=i^l}^{n_{sa}+j_{sa}^{ik}-i^l-j_{sa}+1} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}} \sum_{n_{sa}=n-j^{sa}+1} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{\binom{()}{n_{sa}=n_{ik}}}$$

$$\frac{(n_i - s - k_1 - \dots)!}{(n_i - n - k_1 - \dots)! \cdot \dots \cdot (s)!}$$

$$\frac{(D - l_i)!}{(D + s - \dots - l_i)! \cdot (n - \dots)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1, j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \cdot 5 \wedge s = \dots \wedge k \wedge$$

$$k_z: \dots = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}^{ik})}^{\binom{()}{l_{ik}-l+1}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{\binom{()}{n_{ik}+j_{ik}-j^{sa}-k_2}} \sum_{n_{sa}=n-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \sum_{k=0}^{\binom{D+l_{sa}}{s}} \sum_{\substack{(j_{ik}=j_{sa}^{ik}) \\ j_{sa}^{sa}=j_{sa}}} \sum_{\substack{n_i=n+k \\ (n_{ik}=n_{sa}^{ik}+k_1+1) \\ n_{sa}^{sa}+j_{ik}-j_{sa}^{ik}=k_2}} \frac{(n_i - s - k_1 - k_2)!}{(n_i - j_{sa}^{sa} - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - i^l - l_s$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - j_{sa}^{ik} \wedge$$

$$l_{ik} - j_{ik} + 1 > l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_{ik} - j_{ik} + 1$$

$$l_{ik} \leq D + j_{sa}^{ik} - j_{sa} \wedge l_i \leq D + s - n$$

$$D \geq n < n \wedge l = k_1 + k_2 \wedge$$

$$j_{sa}^{sa} \leq j_{sa}^{sa} - 1 \wedge j_{sa}^{ik} = j_{sa}^{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s \leq n + k \wedge$$

$$z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=i^l}^{\binom{l_{sa}+j_{sa}^{ik}-i^l-j_{sa}+1}{s}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l_i - j_{sa})!}{(l_{ik} - j_{ik} - l_i + 1)! \cdot (j_{ik} - j_{sa} - 1)!}$$

$$\frac{(j_{sa} - l_s - s)!}{(D + s - n - 1)! \cdot (n - s)!}$$

$$\sum_{k=i}^{()} \sum_{l}^{()} \sum_{j_{sa}=j_{sa}}^{()} \sum_{j_{ik}=j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_s > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i = (l_i + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}^{i+1}}^{(l_{ik}-i^{l+1})} \sum_{j_{sa}=j_{sa}^{i+1}}^{(l_{ik}-i^{l+1})} \sum_{j_{sa}=j_{sa}^{i+1}}^{(l_{ik}-i^{l+1})} \dots$$

$$\sum_{n_i=n+k}^{(n_{ik}=n_{i-k_1+1})} \sum_{n_{sa}=n-j_{sa}^{i+1}}^{(n_{sa}=n-j_{sa}^{i+1})} \dots$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(n_i - 2)! \cdot (n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}^{i+1}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_{i-k_1+1})}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{i+1}}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{k=1}^n \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} (n_i - j_{ik} - \mathbb{k}_1 + 1) \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) +$$

GÜLDÜNKYA

$$\begin{aligned}
 & \left(\sum_{k=i^l}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}+1} l_{ik}+j_{sa}-i^l-j_{sa}^{ik}+1 \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - i^l - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(l_{sa} + j_{sa} - l_{ik} - i^l - j_{sa}^{ik})!} \cdot \\
 & \frac{(j_{ik} + l_{k_1} - j_{sa} - l_{ik})!}{(j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=i^l}^{(l_{ik}-i^l+1)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=l_{ik}+j_{sa}-i^l-j_{sa}^{ik}+2}^{l_{sa}-i^l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

GÜLDÜZ

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}^{ik}} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n_{ik}-j_{sa}-l_{k_2})} \frac{(n_i - n_{ik} - l_{k_1} - l_{k_2})!}{(n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \frac{(D + s - n - l_i)!}{(n - s)!}$$

$D \geq n < n \wedge l = i \wedge l_{sa} \leq D + j_{sa} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq j_{ik} + j_{sa} - s$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$D \geq n < n \wedge l = i > 0 \wedge$

$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{l_{k_1}}, \dots, j_{sa}, \dots, l_i\}$

$s \geq 5, l = s + l_k \wedge$

$l_{k_z}: z = 2 \wedge l_{k_z} = l_{k_1} + l_{k_2} \Rightarrow$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left(\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \right)$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \cdot$$

$$\left(\sum_{k=l}^{(l_{ik} - i^l + 1)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{ik}-i^l+1} \right)$$

$$\sum_{n_i=n+l_{sa}-j_{ik}-n+l_{sa}+1}^n \sum_{n_{ik}=n+l_{sa}-j_{sa}^{ik}-j_{sa}^{ik}+1}^{n_{ik}-j_{sa}^{ik}-j_{sa}^{ik}+1} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{n_{sa}=n-j_{sa}^{ik}+1}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} - l_{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=i^l}^{()} \sum_{(j_{ik}=j_{sa}^{ik})}^{()} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_{sa}}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{sa}+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{sa}}$$

GÜLDÜZÜMÜ

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k= {}_i l}^{()} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k= {}_i l}^{()} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\left((D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{()} \sum_{j^{sa}=j_{sa}}^{l_{sa}-i^{l+1}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - 1)!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(D + s - l_{sa} - s)!}{(D + s - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{()} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((n \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D - l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{ik, j^{sa}}^{OST} = \left(\sum_{k=l}^n \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}}^{(n_i - \mathbb{k}_1 + 1)} \sum_{j_{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \right) \cdot \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \left(\sum_{k=l}^n \sum_{j_{ik}=l_{ik}+n-D}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1) l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \right) \cdot \frac{(n_i - j_{ik} - \mathbb{k}_1 + 1)}{n_i = n + \mathbb{k}} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{n_{sa} = n - j^{sa} + 1}$$

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik})} \sum_{j_{ik} = j_{sa}^{ik} + n - D}^{l_{sa}} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa}} \\
 & \sum_{n_i = n + l_{sa} - j_{sa}^{ik} + \mathbb{k}_2 - j_{ik} + 1}^n \sum_{n_{sa} = n - j^{sa} + 1}^{(n_i - j_{sa}^{ik} + \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{()} \sum_{(j_{ik} = j_{sa}^{ik} + j_{sa}^{ik} - j_{sa})}^{()} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}
 \end{aligned}$$

GUIDANCE

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{lk}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n - l_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + (j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n - l_{sa} - s \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + (j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik} j^{sa}}^{DOST} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} j^{sa} = l_{sa}+n-D \\
 &\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - k_2)!} \cdot \\
 &\frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
 &\frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j^{sa} - 1)!} \cdot \\
 &\frac{(l_{sa} - j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\frac{(D + j_{sa} - l - j_{sa}^{ik} + 1)!}{(D + j_{sa} - l - j_{sa}^{ik} + 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 &\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} j^{sa} = l_i+n+j_{sa}-D-s \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \\
 &\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDEN

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee \end{aligned}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \wedge \end{aligned}$$

$$\begin{aligned} & D \geq n < n \wedge l = \mathbb{k} > 0 \wedge \\ & j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge \end{aligned}$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} & f_z^{DOST} j_{ik, j_{sa}}^{DOST} \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right) \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \end{aligned}$$

$$\begin{aligned}
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left(\sum_{k=l}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \right. \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l_{sa} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}
 \end{aligned}$$

GÜLDENWA

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D)} \sum_{(j_{sa}^{ik}=j_{ik}-j_{sa}^{ik})} \sum_{(n+l_k)} \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1})} \sum_{(n_{ik}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \frac{(n_i - j_s - l_{k_1} - l_{k_2})!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$2 \leq l_s < D + l_{ik} + j_{sa}^{ik} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{sa} \leq j^{sa} + j_{sa} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} + j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_s = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$j_{sa} \geq n - l_{sa} \wedge I = l_k > 0 \wedge$$

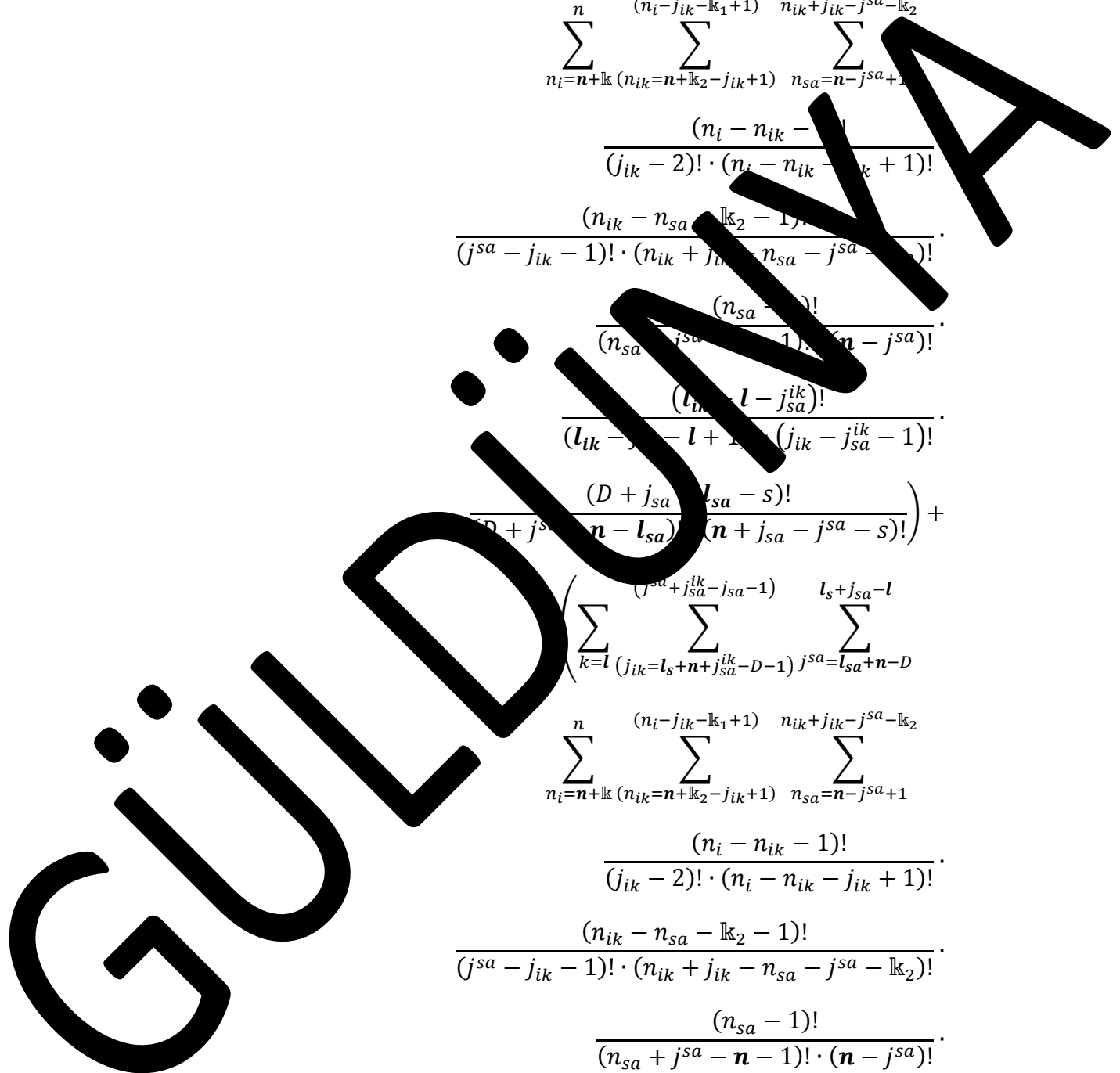
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + l_k \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z^{\mathcal{S}DOST}_{j_{ik}, j^{sa}} = \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_s+j_{sa}-l)}^{j^{sa}=l_{sa}+n-D} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\ \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\ \left(\sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(l_s+j_{sa}-l)}^{j^{sa}=l_{sa}+n-D} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\ \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\ \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)$$



$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} j^{sa} = l_s + j_{sa} - l + 1$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} j^{sa} = l_{sa} + n - D$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_s - a - l} \dots - D - s$$

$$\sum_{=n+k}^{(n_i - j_s)} \sum_{(n_{is} + k + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-k_1} \sum_{(n_{ik}+j_{ik}-j^{sa}-k_2)}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - k_1 - k_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$D + j_{sa} - n - j_{sa}^{ik} + l \leq l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{sa} \leq j^{sa} + j_{sa} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l \geq n - l_i \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \dots)}{(j_{ik} - 2)! \cdot (n - n_{ik} - \dots + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \dots - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \dots)!}$$

$$\frac{(n_{sa} - \dots)!}{(n_{sa} - j^{sa} - \dots - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{sa} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{(\dots)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\dots)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

GÜLDÜZ

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{sDOST} = \left(\sum_{k=l}^{(l_s + j_{sa} - l)} \sum_{j_{ik} = n + \mathbb{k}}^n \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} \right) \cdot \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = i + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n = n + \mathbb{k}}^n \sum_{(n_{is} = n_{is} + \mathbb{k})} (n_{is} + \mathbb{k} + 1) j_{ik}$$

$$\sum_{(n_{ij} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1 - \mathbb{k}_2)} (n_{ij} + s - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)! \cdot (n - l - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)! \cdot (D - l_i)!$$

$$(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$j_{ik}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - j_{sa}^{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge \mathbb{k} = \mathbb{k} > \dots \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \leq \dots = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j_{sa} = l_{sa} + n - D}^{(l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1)}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_s - l - j_{sa} - s)!}{(l_s + j_{sa} - n - 1)! \cdot (n - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{\binom{()}{l_s+j_{sa}-l}} \sum_{\substack{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa} \\ j^{sa}=l_i+n+j_{sa}-D-s}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1}^n \sum_{\substack{() \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \\
 & \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$\begin{aligned}
 & l_s \wedge l_s > D - n + 1 \wedge \\
 & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge
 \end{aligned}$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

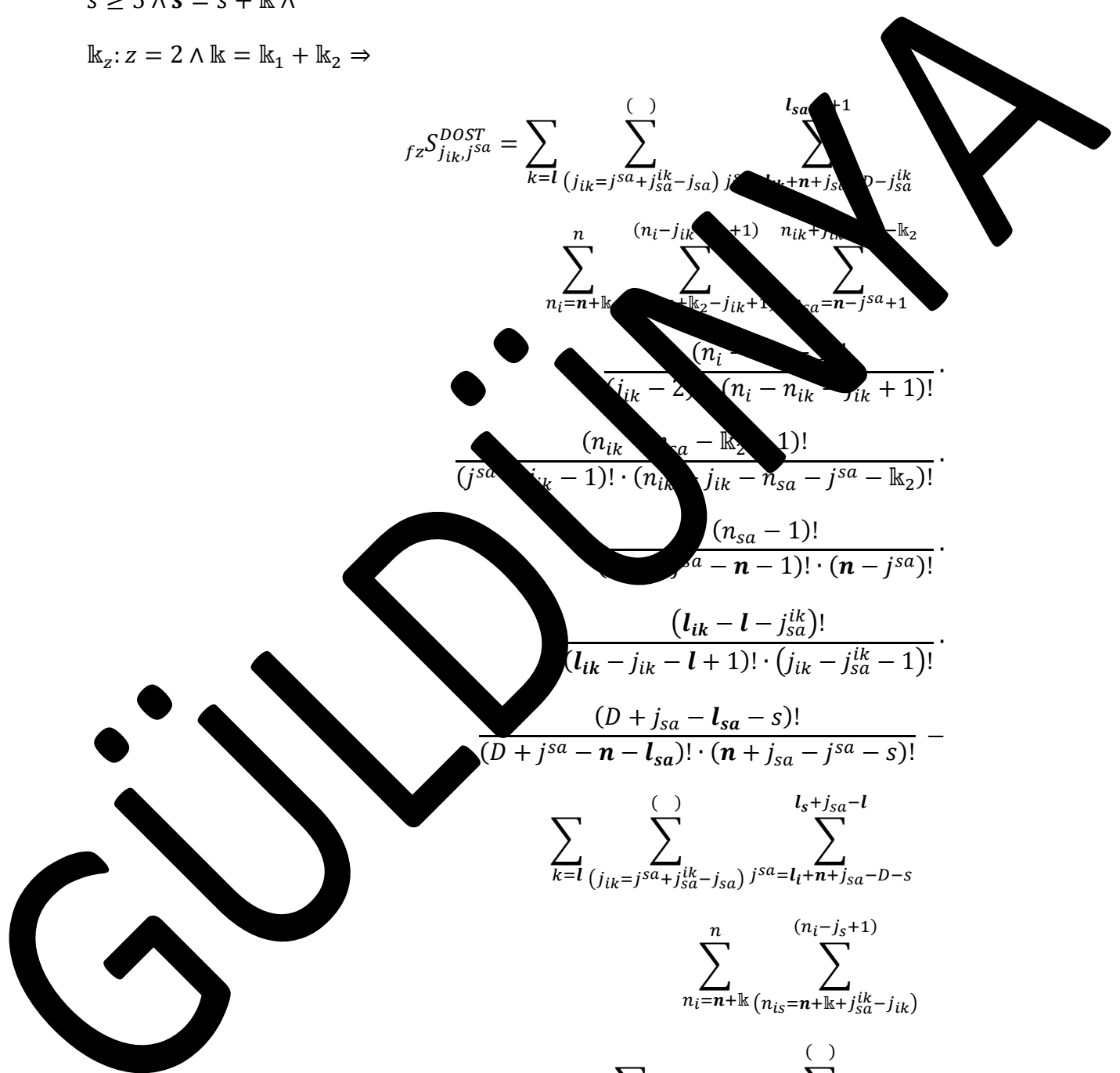
$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\binom{()}{j_{sa}^s=l_i+n+j_{sa}-D-j_{sa}^{ik}}} \sum_{\binom{()}{l_{sa}+1}} \sum_{n_i=n+\mathbb{k}_1}^n \sum_{\binom{()}{n_i-j_{ik}+1}} \sum_{\binom{()}{n_{ik}+j_{ik}-\mathbb{k}_2}} \sum_{\binom{()}{n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik}}} \sum_{\binom{()}{n_{sa}=n-j_{sa}+1}} \frac{(n_i - j_{ik} - 2)! (n_i - n_{ik} - j_{ik} + 1)!}{(j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\binom{()}{j_{sa}^s=l_i+n+j_{sa}-D-s}} \sum_{n_i=n+\mathbb{k}_1}^n \sum_{\binom{()}{n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik}}} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{j_{ik}=l}^{(l_{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-j_{sa}}^{(j_{ik}-j_{sa}^{ik}-1)} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - l)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(\cdot)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{(\cdot)}$$

$$\frac{(n_i - s - k_1)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - k_1)!}{(l_s + j_{sa} - j_{ik} - k_1)! \cdot (j_{ik} - j_{sa} - 1)!}$$

$$\frac{(D - l - k_1)!}{(D + j_{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}^{ik}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge$

$D \geq n < n \wedge l = k_1 = 0 \wedge$

$j_{sa} \leq j_{sa}^l - 1 \wedge j_{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa} - k_1, j_{sa}^{ik}, \dots, k_2, \dots, j_{sa}^s\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{ik} + n - D)}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{ik} + j_{ik} - j_{sa} - k_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{j_{ik}=l_i}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik} - D - s}^{(n_{sa} - j_{sa}^{ik})} \sum_{n_{is}=n + \mathbb{k}}^{(n_i - j_s + 1)} \sum_{n_{sa}=n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}^{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=l_i+n+j_{sa}-D-1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(j_{sa} - l - j_{sa}^{ik})!}{(l_{sa} + j_{sa} - n + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

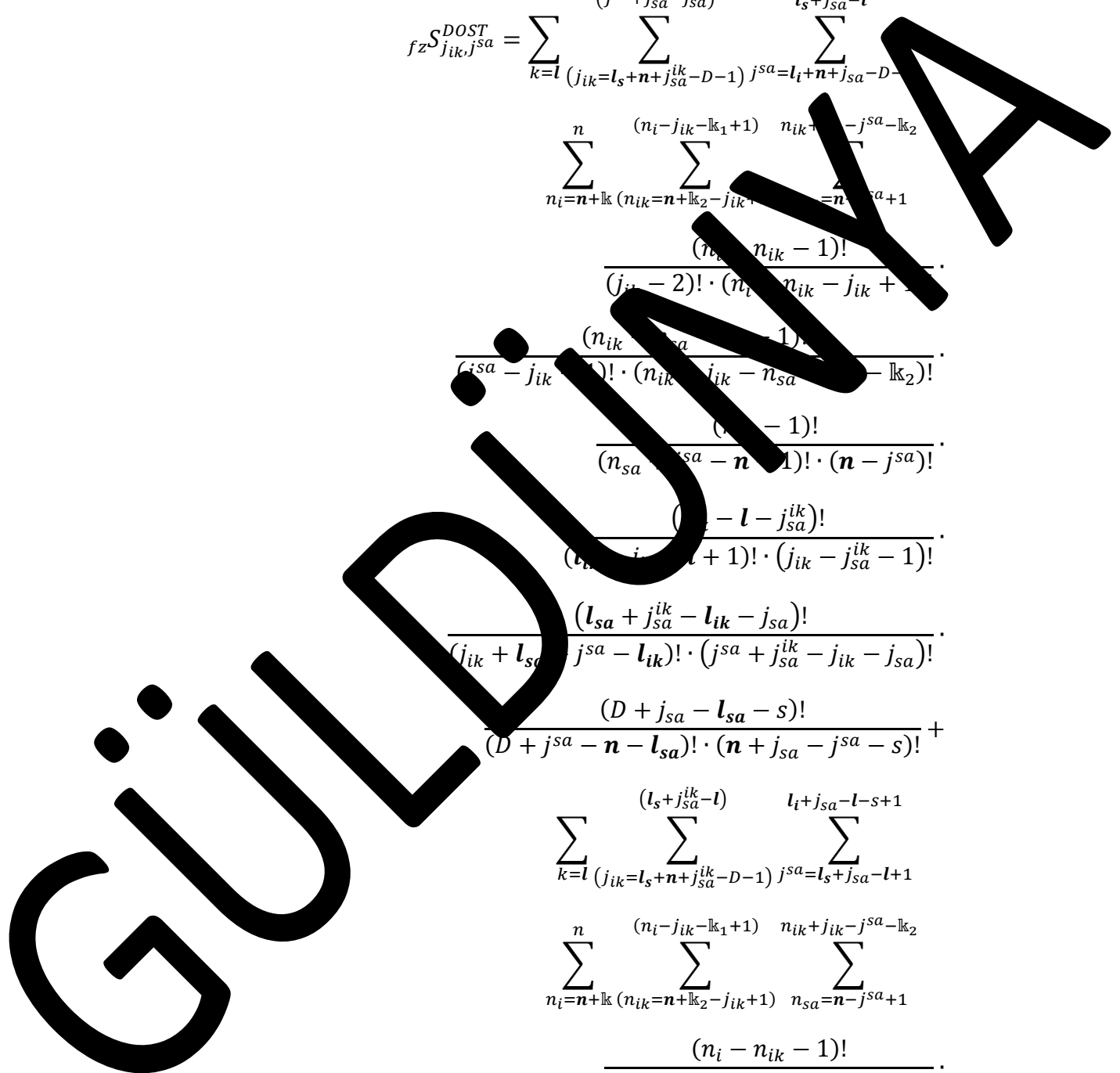
$$\sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=l_s+j_{sa}-l+1}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$



$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{D}{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}^{ik}=l_{sa}-n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}^{ik}=n+l_k}^{(n_i-j_{sa}^{ik})} \sum_{j_{sa}^{ik}=n+l_k+j_{sa}^{ik}-j_{ik}} \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_{sa} = D - n - 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge$$

$$l_{ik} - l_{k_1} + 1 = j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_{ik}, j_{sa}}^{DOST} = & \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-s-1)}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_i - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \\
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

GÜLDEN

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is} \dots)}^{(n_{i_1}+1)}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{sa}-l_{k_1}-l_{k_2})}^{(\dots)}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s - l_i - j_{sa}) \vee (D \geq n < n \wedge l_s > D - n + 1 \wedge j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee (D \geq n < n \wedge l_s > D - n + 1 \wedge j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{()} \binom{l_s + j_{sa} - l + 1}{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}) j_{sa} = l_{sa} + j_{sa} - D}$$

$$\sum_{n_i = n + k}^n \binom{j_{ik} - k_1 + 1}{n_{ik} = n_{ik} - j_{ik} + 1} \binom{k + j_{ik} - j_{sa} - k_2}{n_{sa} = n_{sa} + 1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l} \sum_{()} \binom{l_s + j_{sa} - l}{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}) j_{sa} = l_i + n + j_{sa} - D - s}$$

$$\sum_{n_i = n + k}^n \binom{(n_i - j_s + 1)}{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1} \binom{()}{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}$$



$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = 0 > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 0 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_s - l - j_{sa} - s)!}{(l_s + j_{sa}^{ik} - n - 1)! \cdot (n - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik})} \sum_{(j_{ik}=l_i + n_{sa}^{ik} - D - s)}^{(j_{ik} - l_i + n_{sa}^{ik} - D - s)} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}}^{(j_{ik} - l_i + n_{sa}^{ik} - D - s)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$(n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik}}^{DCT} = \sum_{k=l}^{\binom{D}{j_{ik}}} \sum_{\substack{j_{sa}^{ik} \\ j_{sa}^{ik} - j_{sa}}} \sum_{\substack{j_{sa}^{ik} + 1 \\ l_{ik} + n + j_{sa} - D - j_{sa}^{ik}}} \frac{\binom{n}{n_{ik} - k_1 + 1} \binom{n_{ik} + j_{ik} - j_{sa} - k_2}}{\binom{n_{ik} - k_1}{n_{ik} - k_1} \binom{n_{sa} - j_{sa} + 1}} \cdot \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{\binom{D}{j_{ik}}} \sum_{\substack{j_{sa}^{ik} \\ j_{sa}^{ik} - j_{sa}}} \sum_{\substack{l_s + j_{sa} - l \\ j_{sa}^{ik} = l_i + n + j_{sa} - D - s}} \sum_{\substack{n \\ n_i = n + k_1}}^{\binom{n}{n_{is} = n + k_1 + j_{sa}^{ik} - j_{ik}}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$

$D \geq n < n \wedge I = 1 - 0 \wedge$

$j_{sa}^i \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: (\mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i)$

$\geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_1 = \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}$$

$$\sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{(n_{is} + j_{sa}^s - j_{sa}^{ik} = \mathbb{k}_1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D) \dots} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \dots$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \dots$$

$$\frac{(n_i - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{sa} - \mathbb{k}_2 + 1)!}$$

$$\frac{(n_{ik} - j_{sa} - \mathbb{k}_2 + 1)!}{(j_{sa}^{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

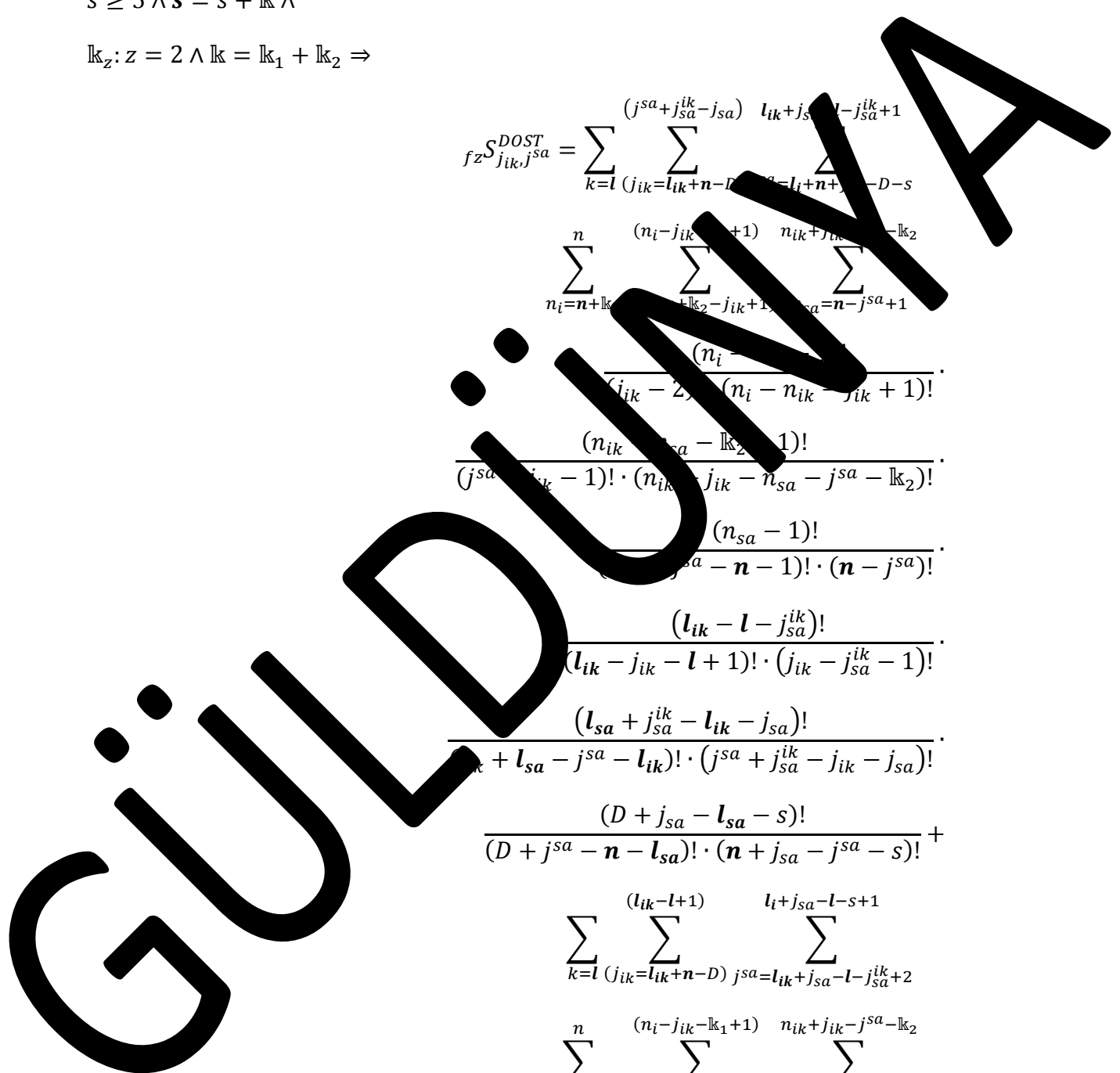
$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$



$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa})!}$$

$$\sum_{k=l}^{l_{sa} + j_{sa} - l} \binom{l_{sa} + j_{sa} - l}{k} \sum_{j_{sa}^{ik} = n + \mathbb{k}}^{n + \mathbb{k} + j_{sa}^{ik} - j_{ik}} \binom{l_{sa} + j_{sa} - l}{j_{sa}^{ik} - j_{sa}}$$

$$\sum_{j_{sa}^{ik} = n + \mathbb{k}}^{n + \mathbb{k} + j_{sa}^{ik} - j_{ik}} \binom{n_i - j_s + 1}{j_{sa}^{ik} - j_{sa}}$$

$$\sum_{k=n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \binom{l_{sa} + j_{sa} - l}{k}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D - j_{sa}^{ik} < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i + n + j_{sa}^{ik} - D - s)} \sum_{(j_{ik} - D)}^{l_i + j_{sa} - l} \sum_{j_{sa} = n + j_{sa} - D - s}^{j_{sa} - \mathbb{k}_2} \frac{(n_i - j_{ik} - \mathbb{k}_1 + 1)!}{(n_i - n_{ik} - 1)!} \cdot \frac{(n_i - n_{ik} - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_i - j_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{j_{sa} - \mathbb{k}_2} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2}$$

$$\begin{aligned}
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - j_{sa} - 1)! \cdot (D + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{l_s + j_{sa}^{ik}} \sum_{j_{ik}=l_{sa} + j_{sa}^{ik} - D - j_{sa}^{ik}}^{j_{sa}^{ik} - D - j_{sa}^{ik}} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}}^{j_{sa}^{ik} - D - j_{sa}^{ik}} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \\
& \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$(D \geq n - n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \vee$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s - j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}+1} \sum_{(j_{sa}=j_{sa}^{ik}+2)}^{l_{sa}+1} \sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}+j_{ik}-l_{k_2})}^{(n_{ik}+j_{ik}-l_{k_2})} \sum_{(j_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-l_{k_2})} \frac{(n_i - j_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - j_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$

GÜLDÜZMAYA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_{ik}, j^{sa}}^{DOST} = & \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(n_i - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik} \dots$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{sa} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - j_{sa}^{ik}$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > l_s \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$j_{sa} - j_{sa}^{ik} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{S_{j_{ik}, j_{sa}}} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j_{sa} = l_s + n + j_{sa} - D - 1}^{l_s + j_{sa} - l}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_{ik}-\mathbb{k}_1+1) \\ (n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_s - l - j_{sa} - s)!}{(l_s + j_{sa} - n - 1)! \cdot (n - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{\binom{()}{}} \sum_{\substack{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa} \\ j^{sa}=l_i+n+j_{sa}-D-s}}^{l_{sa}-l+1} \sum_{\substack{n \\ n_i=n+\mathbb{k} \\ (n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}} \sum_{\substack{(n_i-j_s+1) \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^n \sum_{\binom{()}{}} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$l_s \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - l - j_{sa}^s = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \dots$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}^{(n_i - j_{ik} + 1)} \sum_{(n_{ik} = j_{ik} - \mathbb{k}_2)}^{(n_{ik} + j_{ik} - \mathbb{k}_2)} \sum_{(n_{sa} = n - j_{sa} + 1)}^{(n_{sa} + j_{sa} - 1)}$$

$$\frac{(n_i - n_{ik} - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}{(j_{sa}^{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

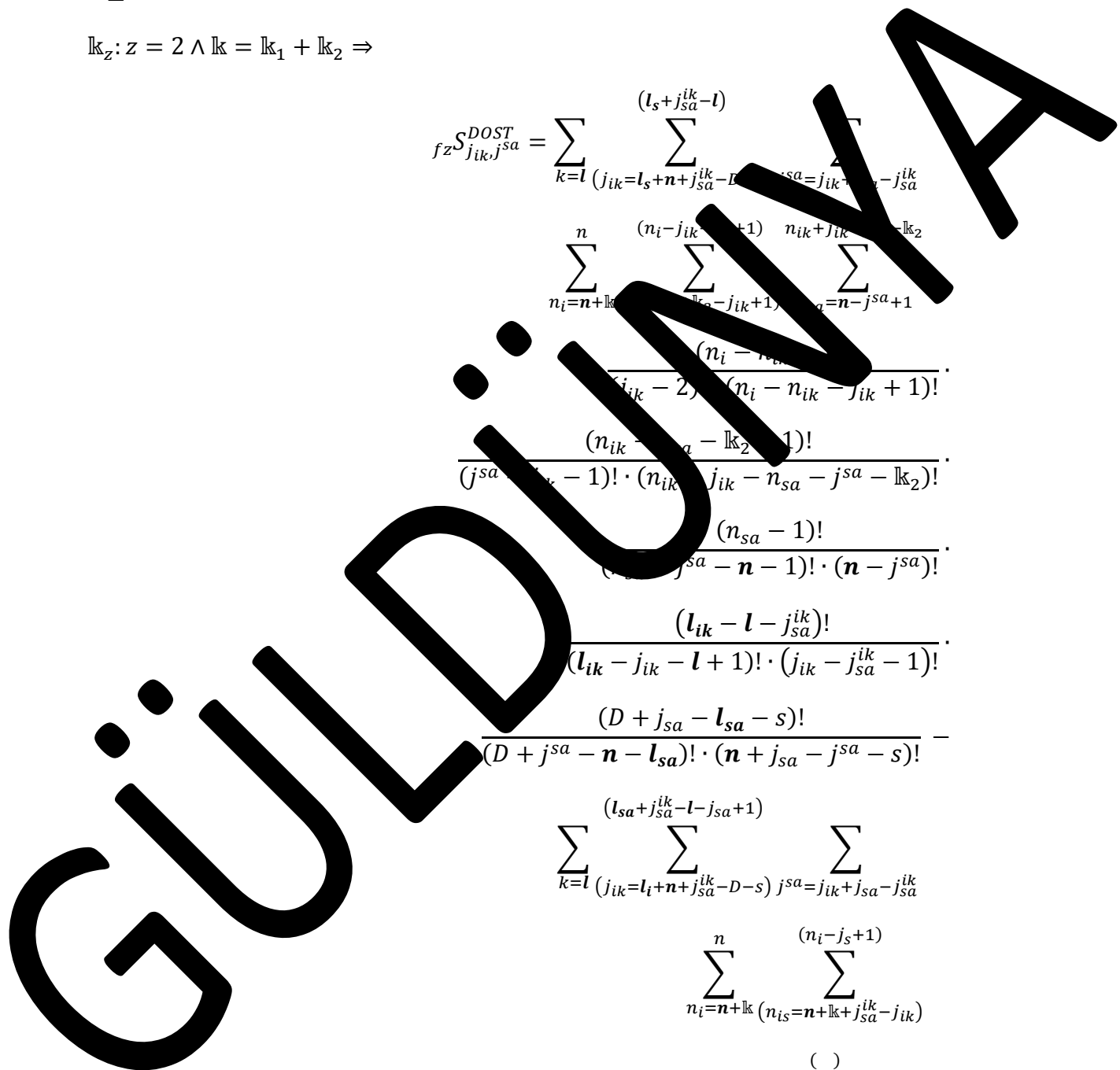
$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z^s}^{j_{ik}^{sa}} = \sum_{k=l}^n \binom{l_i + j_{sa} - l - s + 1}{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} j^{sa} = l_i + n + j_{sa} - D - s$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}}} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{lk}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+l_k+j_{sa}^{lk}-j_{sa}}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{lk}-j_{sa}^{lk}-l_{k1}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}^{lk}-l_{k2}}}$$

$$\frac{(n_i - s - l_{k1} - l_{k2})!}{(n_i - n - l_{k1} - l_{k2})! \cdot (n_i - s)!}$$

$$\frac{(l_s - l_{k1} - l_{k2})!}{(l_s + j_{sa}^{lk} - j_{sa}^{lk} - l_{k1} - l_{k2})! \cdot (j_{sa}^{lk} - j_{sa}^{lk} - 1)!}$$

$$\frac{(D - s)!}{(D + j^{sa} + s - n - j_{sa}^{lk})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{lk} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa}^{lk}$

$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} \leq n - j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{lk} + 1 > l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa}^{lk} = l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$

$D \geq n < n \wedge l_s = 0 \wedge$

$j_{sa}^{lk} \leq j_{sa}^{lk} - 1 \wedge j_{ik} < j_{sa}^{lk} - 1 \wedge j_{sa}^{lk} = j_{sa}^{lk} - 1 \wedge$

$s: (j_{sa}^{lk_1}, j_{sa}^{lk_2}, \dots, j_{sa}^{lk_z}, \dots, j_{sa}^{lk_z})$

$\geq 5 \wedge s = s + l_k \wedge$

$l_{k_z}: z = 2 \wedge l_{k_z} = l_{k_2} \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{(l_i+j_{sa}^{lk}-l-s+1)}{j_{ik}=l_i+n+j_{sa}^{lk}-D-s}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk}} \sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_{ik}-l_{k1}+1)}{n_{ik}=n+l_{k2}-j_{ik}+1}} \sum_{n_{sa}=n-j^{sa}+1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{\substack{j_{ik} = l_{ik} + n_{sa} - j_{sa}^{ik} \\ j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}} \sum_{\substack{j_{sa} = j_{sa} - j_{sa}^{ik} \\ j_{sa} = j_{sa} - j_{sa}^{ik}}} \sum_{\substack{n_{is} = n + \mathbb{k}_1 + j_{sa}^{ik} - j_{ik} \\ n_{is} = n + \mathbb{k}_1 + j_{sa}^{ik} - j_{ik}}} \sum_{\substack{n_{is} = n + j_{sa} - j_{sa}^{ik} \\ n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - 1) j_{sa} = l_s + n - D}^{j_{sa} - l} \sum_{(j_{sa} = l_s + n - D)}^{j_{sa} - l} \dots$$

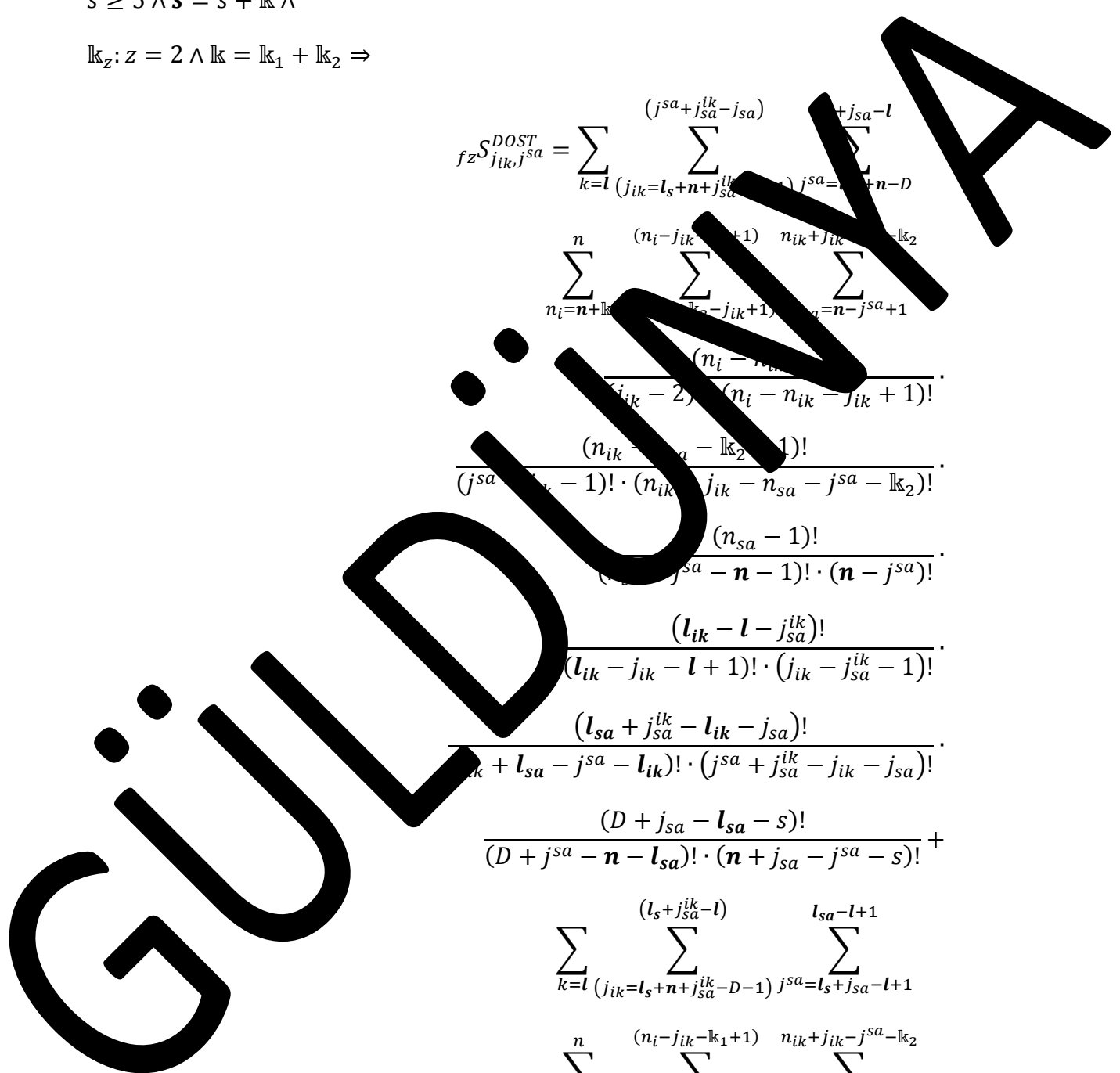
$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}^{(n_i - j_{ik} - 1)} \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{n_{ik} + j_{ik} - \mathbb{k}_2} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{sa} = n - j_{sa} + 1} \dots$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_s + j_{sa} - l + 1}^{l_{sa} - l + 1} \dots$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \dots$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \dots$$



$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa})!} \cdot \sum_{j_{ik}=j_{sa}^{ik} - j_{sa}}^{n - j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa}^{ik}=j_{sa}^{ik} - j_{sa}}^{n - j_{sa} - l - j_{sa}^{ik} + 1} \sum_{n_i=n+\mathbb{k}_1}^{n_i=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik}} \sum_{n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik}}^{(n_i-j_s+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D - l_i) < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - j_{sa} - 1)} \sum_{j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{j_{sa} = l_{sa} + n - D}^{(n_{sa} - \mathbb{k}_2)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - j_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{(l_{sa} - l + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik} - 1)} \sum_{(j_{ik}=l_{ik} + j_{sa}^{ik} - D - j^{sa})} \sum_{(n_{sa}=j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik}=n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa}=n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < l \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa}^{l_s + j_{sa} - l})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j_{sa} = l_s + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}^{(n_i - j_{ik} - 1)} \sum_{(n_{ik} = n - j_{sa} + 1)}^{(n_{ik} + j_{ik} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa}^{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

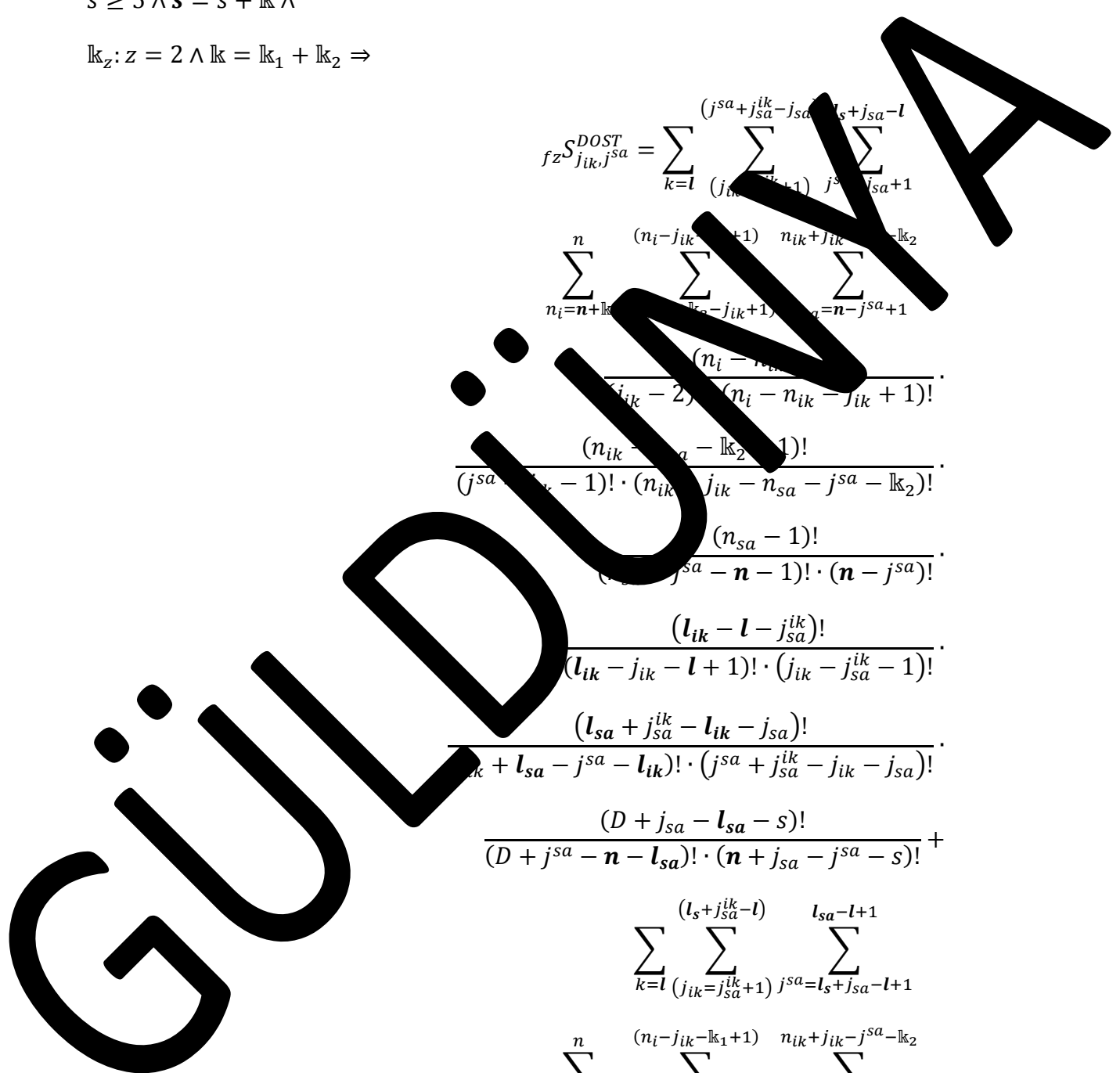
$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j_{sa} = l_s + j_{sa} - l + 1}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$



$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa})!}$$

$$\sum_{k=l}^{n_{sa} - j_{sa}^{ik} - \mathbb{k}_1} \sum_{j_{sa}^{ik} = j_{sa} + j_{sa} - k}^{l_s + j_{sa} - l} \sum_{j_{sa}^{ik} = j_{sa} + 1}^{n_i - j_s + 1}$$

$$\sum_{k=n+l}^{n_{is} = n+k+j_{sa}^{ik} - j_{ik}}$$

$$\sum_{k=n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq n + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(j_{sa} - l - j_{sa}^{ik})!}{(j_{sa} - j_{sa} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) + \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{sa}+2}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}+1} \sum_{(j_{sa}=j_{sa}^{ik}+2)}^{l_{sa}+1} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}+j_{ik}-l_{k_2})}^{(n_{ik}+j_{ik}-l_{k_2})} \\
 & \frac{(n_i - n_{ik} - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}{(n_{ik} - j_{sa} - l_{k_2} - 1)!} \cdot \\
 & \frac{(n_{ik} - j_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=j_{sa}+1}^{()} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{n_i, j_{sa}^{ik}}^l = \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_s+j_{sa}-l)}^{j_{sa}=j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right)$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{sa} + 2}^{l_s + j_{sa} - l} \right)$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = l_s + j_{sa} - l + 1}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

GÜLDÜŞMAYI

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + \dots)} \dots \frac{(n_i - j_s + \dots)!}{(n_i - \dots - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s = l \wedge l_{sa} = D + j_{sa} - n \wedge$

$j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - \mathbb{k} + 1 \leq j^s \leq n + j_{sa} - s \wedge$

$l_{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_{ik}, j_{sa}}^{DOST} = & \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(D + j_{sa} - n - l_{sa} - l)! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} + \\
 & \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
 \end{aligned}$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{sa}^{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-l_{sa}^{ik})} \frac{(n_i - s - l_{sa}^{ik} - l_{sa}^{ik})!}{(n_i - l_{sa}^{ik} - l_{sa}^{ik})! \cdot (n - s)!} \cdot \frac{(n_i - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + l_{sa}^{ik} - n - l_i - j_{sa}^{ik})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} \geq l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n$$

$$D \geq n < n \wedge I = k > 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s \leq s + k \wedge$$

$$k_2: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j^{sa} - s)!} \right) + \\
 & \left(\sum_{k=l}^{(l_s + j_{sa}^{ik})} \sum_{\substack{j_{sa}^{ik} \\ (j_{ik} - j_{sa}^{ik} + 1)}} \sum_{\substack{l_{sa}-l+1 \\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}} \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
 \end{aligned}$$

GÜLDÜZMAYA

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - (n_i - j_s + 1))}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(\dots)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}^{(\dots)}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n_i - s)!}$$

$$\frac{(l_s - l + 1)!}{(l_s + j_{sa} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - 1)!}{(D + j_{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + \dots - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_{ik} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$l_{sa} \leq \dots + j_{sa} - n \wedge \dots \leq D + s - n \wedge$

$D \geq n < n \wedge l_{ik} > 0 \wedge$

$j_{sa} = j_{sa}^{i_s} - 1 \wedge j_{sa}^{ik} < j_{sa}^{i_s} - 1 \wedge j_{sa} = j_{sa}^{i_s} - 1 \wedge$

$s: \{j_{sa}^s, k_1, \dots, k_2, j_{sa}^s, \dots, j_{sa}^i\} \wedge$

$s \geq \dots s = s + \dots$

$k_2: z = 2, \dots = k_1 + k_2 \Rightarrow$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa} - j_{sa}^{ik} - j^{sa} - s)!} \cdot \sum_{k=0}^{j_{sa}^{ik}-l} \sum_{j_{ik}=j_{sa}^{ik}+k}^n \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $n \geq n < \dots \wedge l \neq \dots \wedge l \wedge l_s \leq D - n + 1 \wedge$
- $2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \left(\sum_{k=l} \left(\sum_{(j_{ik}=j_{sa}+j_{sa}^{ik})} \sum_{(j_{sa}=l_{sa})} \frac{l_{ik}+j_{sa}-j_{sa}^{ik}+1}{(j_{sa}+j_{sa}^{ik}-j_{sa}^{ik})!} \right) \right) \cdot \frac{(n_i - j_{ik} - k_1 + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} + j_{ik} - j_{sa} - k_2)!}{(n_{ik} - n_{sa} - k_2 - 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{(j_{sa}=l_{sa}+n-D)} \frac{(j_{sa}+j_{sa}^{ik}-j_{sa}-1) l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{(j_{sa}+j_{sa}^{ik}-j_{sa}-1)!} \right) \cdot \frac{(n_i - j_{ik} - k_1 + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} + j_{ik} - j_{sa} - k_2)!}{(n_{ik} - n_{sa} - k_2 - 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \right)$$



$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{(j_{sa}^{ik}=j_{sa}^{ik}-j_{ik}+1)}^{(l_{ik}-l+1)} \cdot \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k+j_{ik}+1)}^{(n_{ik}=n+l_k+j_{ik}+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}=n-j^{sa}+1)} \cdot \\
 & \frac{(n_i - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq i - 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_s \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1, j_{sa}^s = j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^l\} \wedge$

$s = 5 \wedge s = \dots + \mathbb{k} \wedge$

$\mathbb{k}_2: \dots = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} j_{sa}^{sa+n-D}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)} \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n - n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + j_{sa}^{ik} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \neq j_{ik} \wedge j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=l_{sa}+n}^{l_s+j_{sa}-l} \right. \\ \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik})}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \\ \left. \frac{(n_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa} - 1)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!} + \right) \\ \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j_{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right) \\ \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

GÜLDEN

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} - l_s + k - l + 1)}^{(n - j_{ik} - k + 1)} \sum_{(n_{ik} + j_{ik} - j_{sa}^{ik} - k_2)}^{(n - j_{sa}^{ik} + 1)} \\
 & \frac{(n_i - n_{ik})!}{(n_{ik} - k_2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - k_2 - k_2 + 1)!}{(j^{sa} - k_2 - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_{ik} = j_{sa}^{ik} + j_{sa}^{ik} - j_{sa})}^{()} \sum_{(j^{sa} = l_i + n + j_{sa} - D - s)}^{(l_s + j_{sa} - l)} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{()}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq i - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} -$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \dots + \mathbb{k}_2 \Rightarrow$$

$$f_z \mathcal{S}_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

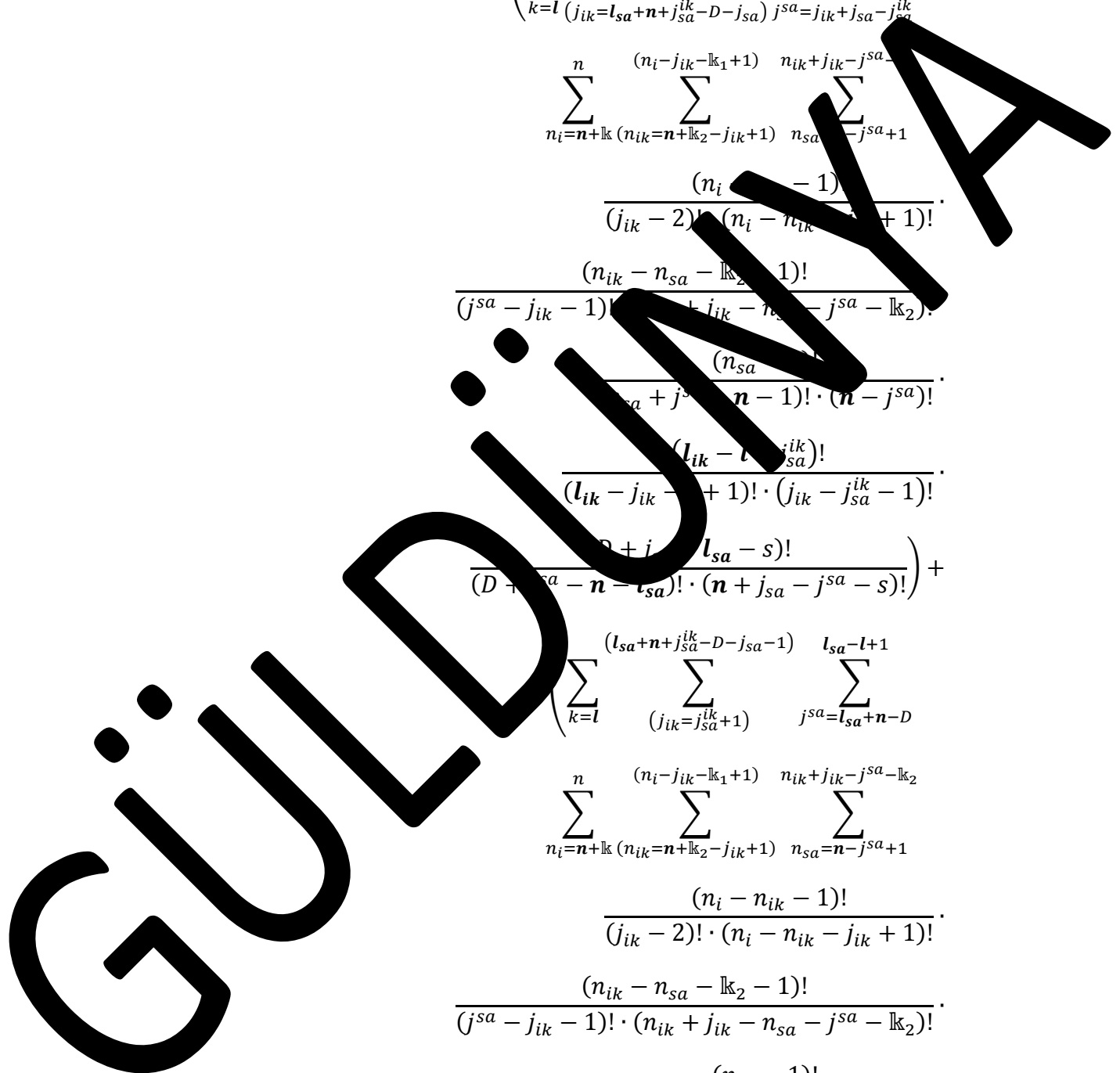
$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D, \dots, n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1)} \frac{(n_i - j_s)!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge l \wedge l_s = D - n - l \wedge 2 \leq l < D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - l_{sa} - 1 \wedge j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} + 1 = j^{sa} \leq n + j_{sa} - s \wedge l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i < n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge D \geq n < n \wedge l = \mathbb{k} > 0 \wedge j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z^{S_{j_{ik}j^{sa}}} = \left(\sum_{k=l}^{(\mathbb{l}_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(\mathbb{l}_{ik} - l - j_{sa}^{ik})!}{(\mathbb{l}_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\ \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \left. \frac{(\mathbb{l}_{ik} - l - j_{sa}^{ik})!}{(\mathbb{l}_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right)$$



$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n+l_k-j_{sa}+1)}^{n_{ik}+j_{sa}-j_{sa}^{ik}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \Big) -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-l+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot$$

GÜLDÜZMAYA

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2$

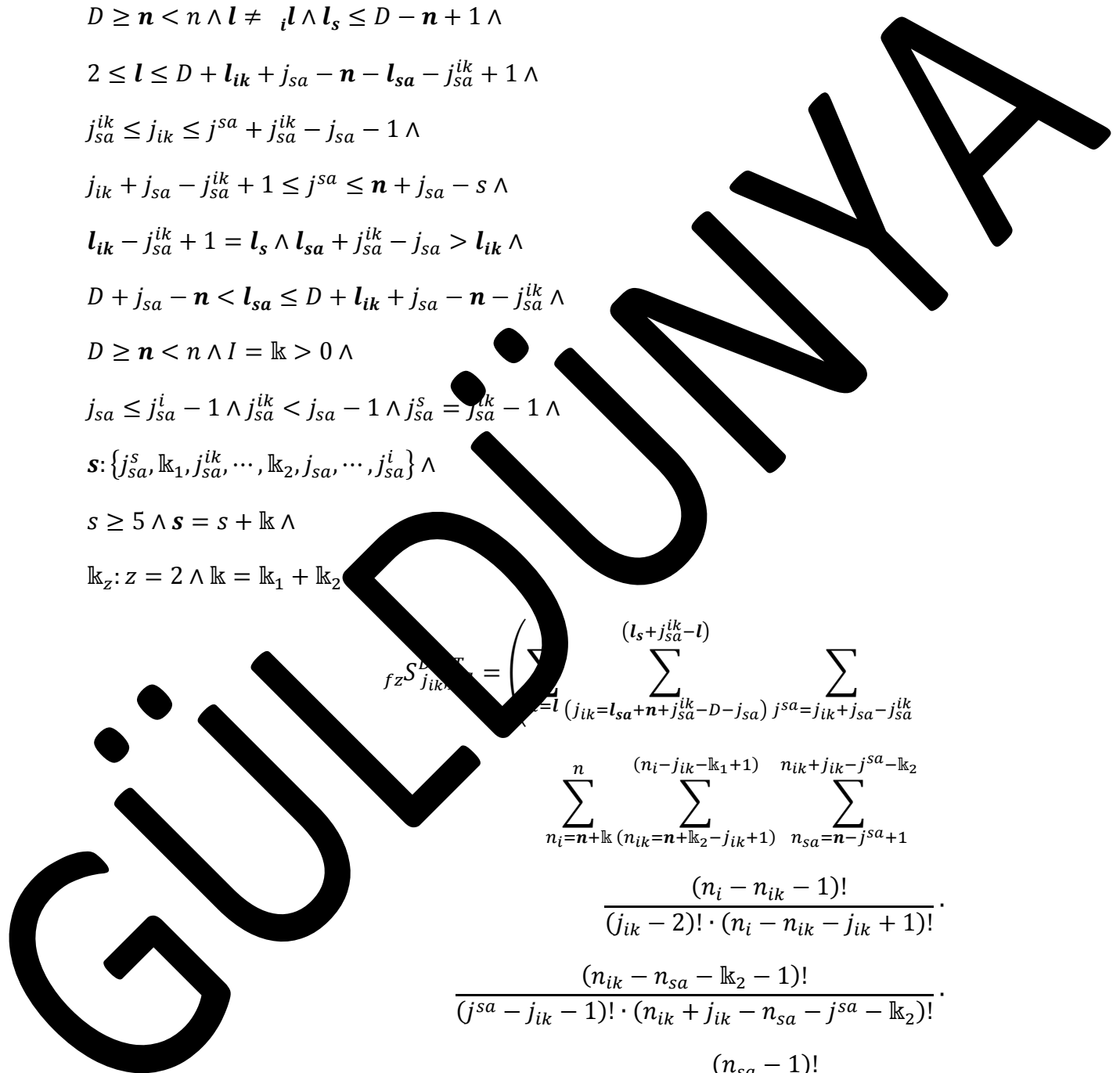
$$f_z S_{j_{ik}}^{l_s} = \sum_{l=1}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\begin{aligned}
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left(\sum_{k=l}^{l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D} \right. \\
 & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{ik} + j_{ik} - l_{sa}^{ik})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
 \end{aligned}$$

GÜLİSMA

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - l_{sa} - l_{ik} - j_{sa}^{ik})} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - k_1)} \sum_{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{(n_i - j_s + k)} \sum_{(n_s + k)} \sum_{(n_{is} + k + j_{sa}^{ik} - j_{ik})} \frac{(n_i - s - k_1 - k_2)!}{(n_i - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s = l \wedge l_s \geq D - n - 1 \wedge$

$j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$\begin{aligned}
 f_Z S_{j_{ik} j_{sa}}^{DOST} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 &\frac{(n_i - n_{sa} - l_{k_1} - 1)!}{(n_i + j^{sa} - n_{sa} - 1)! \cdot (n - j^{sa} - l_{k_1} - 1)!} \cdot \\
 &\frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - n_{sa} - l_{sa} - s)!}{(D - j^{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 &\sum_{k=l}^{(j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 &\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_{sa} = j_{sa}^{ik} - 1)}^{(j_{sa} - j_{sa}^{ik} + 1)}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n_{ik} - k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{sa} - j_{sa}^{ik} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} + 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

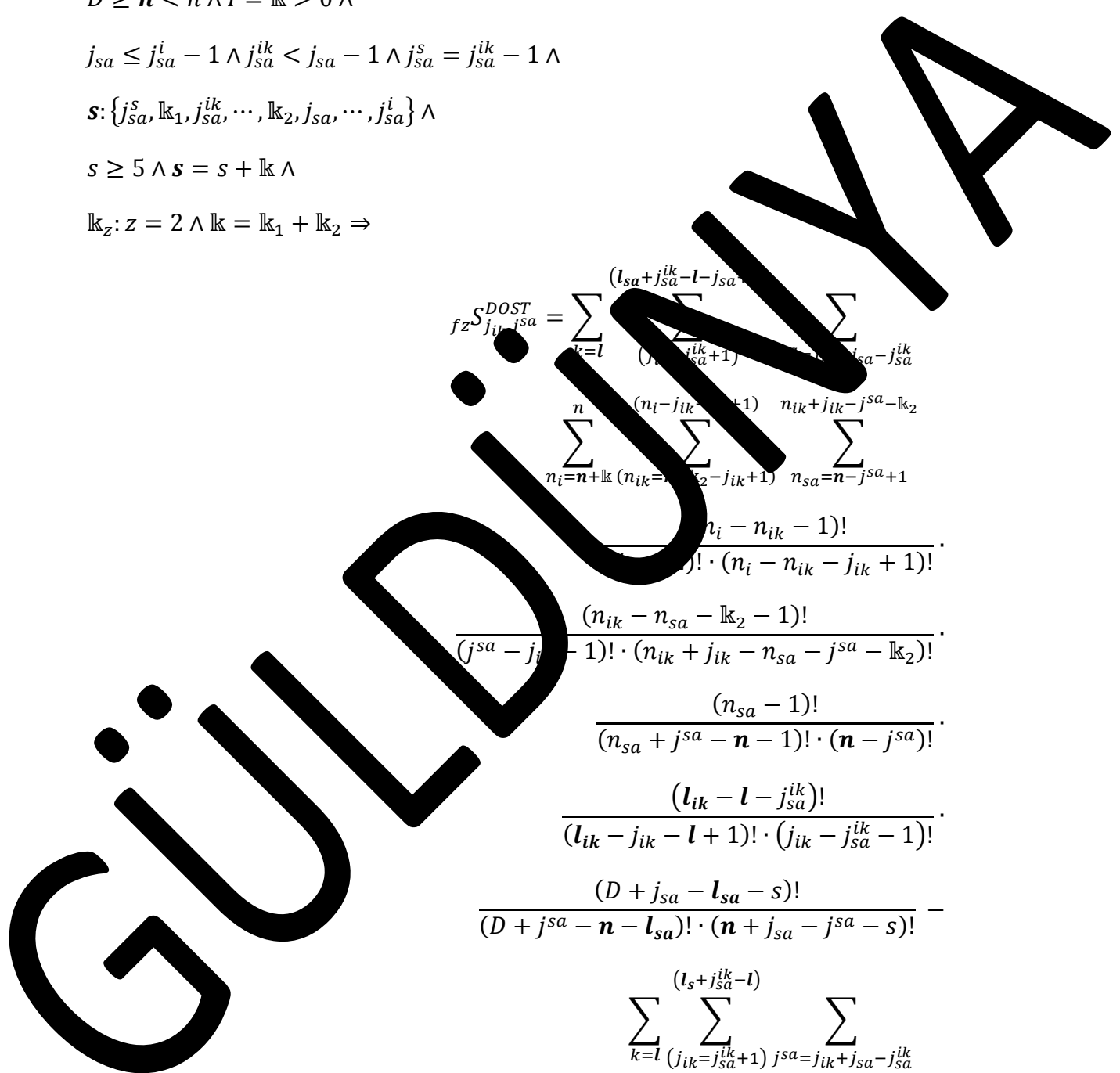
$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + s - n < l_i \leq D + l_s + s - n - 1)$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + s - n < l_i \leq D + l_s + s - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k}_1 = 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2, \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} l_{ik+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=1}^{(l_{ik}-1)} \sum_{j_{sa}^{ik}+1}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

GÜLDENKA

$$\sum_{k=l}^{\binom{)}{}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} l_{ik}+j_{sa}-l-j_{sa}^{ik}+1$$

$$\sum_{j^{sa}=l_i+n+j_{sa}-D-s} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{sa}^{ik})} \binom{(n_i-j_s+1)}{}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik}-k_2)} \binom{)}{}$$

$$\frac{(n_i-s-k_1-k_2)! \cdot (n_i-s)!}{(n_i-n-k_1-k_2)! \cdot (n_i-s)!}$$

$$\frac{(l_s-l_i-k_1-k_2)!}{(l_s+j_{sa}-j_{sa}^{ik}-k_1-k_2)! \cdot (j_{sa}^{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(D-n-k_1-k_2)!}{(D+j^{sa}+s-n-k_1-k_2-j_{sa})! \cdot (n_i+j_{sa}-j^{sa}-s)!}$$

$$\left((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n - l_i \leq D - l_s + s - n - 1) \wedge$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n - l_s \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D - n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{n_i+n+\mathbb{k}_1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

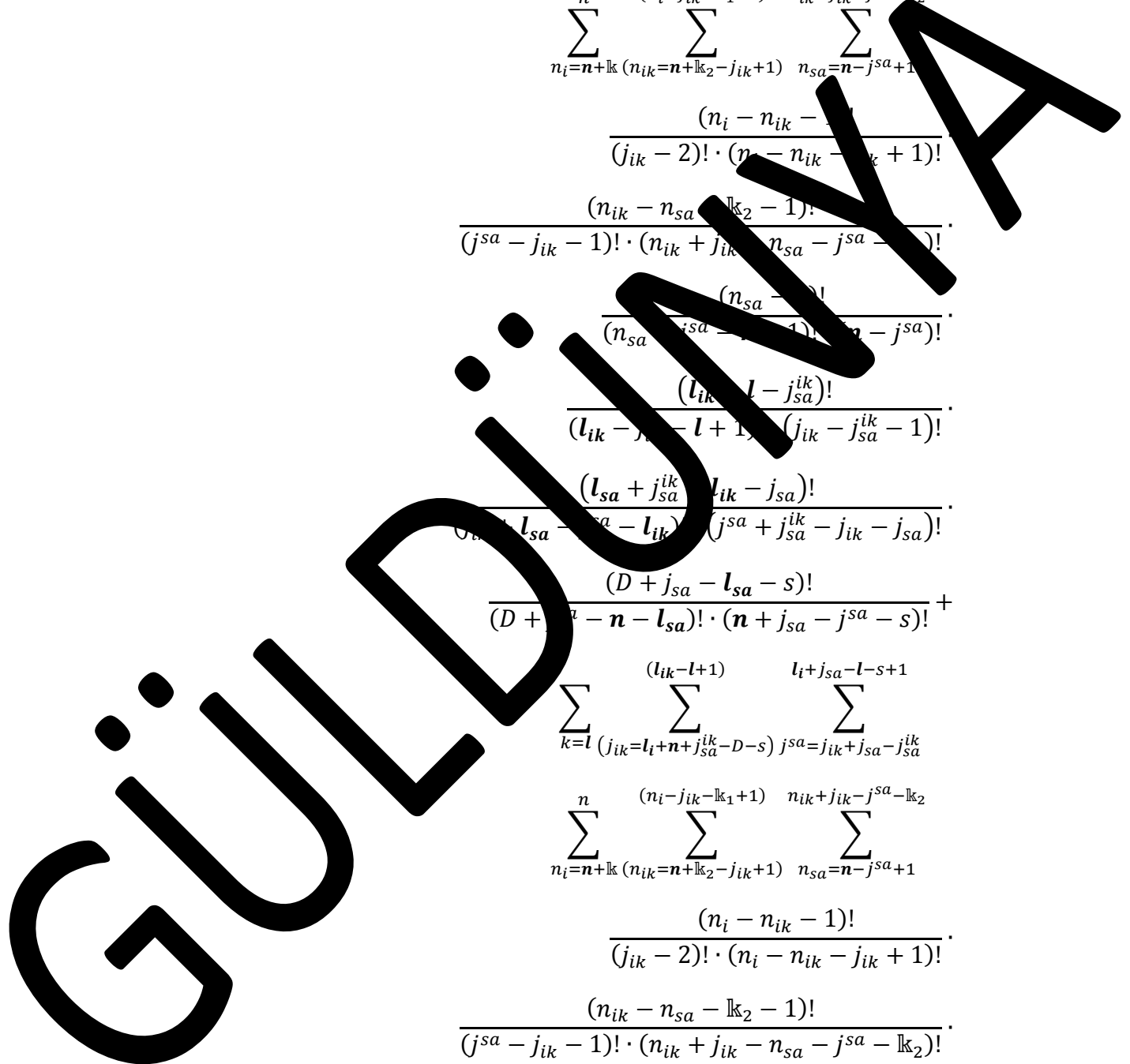
$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n_i+n+\mathbb{k}_1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(n_{ik}=n+l)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_{is}=n+l-k)} \frac{(n_{is}-l_{ik}-j_{ik})!}{(n_{is}-l_{ik}-j_{ik})!} \cdot \frac{(n_{ik}-j_{sa}-l_{k_2})!}{(n_{ik}-j_{sa}-l_{k_2})!} \cdot \frac{(n-s-l_{k_1}-l_{k_2})!}{(n-s-l_{k_1}-l_{k_2})! \cdot (n-s)!} \cdot \frac{(l_{sa}-l-1)!}{(l_{sa}+j_{sa}-j_{sa}^{ik}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_{ik}-l)!}{(D+j_{sa}+l_{sa}-n-l_i-j_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq l_{sa} + j_{sa}^{ik} - l_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq l_{sa} \leq n + j_{sa} - j_{sa}^{ik}$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - l_{sa} < l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \geq 5 \wedge s = s + l_{k_2} \wedge$$

$$s \geq 5 \wedge s = s + l_{k_2} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$\begin{aligned}
 f_{z, j_{ik}, j_{sa}}^{DOST} = & \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{n_i + j_{ik} - j_{sa} - \mathbb{k}_2} \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa}}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa} = l_s + j_{sa} - l + 1}^{n_i + j_{ik} - j_{sa} - \mathbb{k}_2} \\
 & \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

GÜLDEN

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} j_{sa}^{s_a=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{is}+l_{ik}-j_{ik})}^{(n_{is}+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-l_{ik}}^{(\quad)} \sum_{(j_{sa}-l_{k_2})}^{(\quad)} \frac{(n-s-l_{k_1}-l_{k_2})!}{(n-l_{k_1}-l_{k_2})! \cdot (n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i - l)!}{(D + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - j_{sa}^{ik}$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - l_{sa} < l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D > n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_{ik} j_{sa}}^{DOST} = & \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \\
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

GÜLDEN

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik} \sum_{n=n+\mathbb{k}}^n \sum_{(n_{is} = n - j_{ik})}^{(n_i - \mathbb{k} + 1)} \frac{(\dots)}{(n - s - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(j_{sa} - l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = 1 \wedge l_s \leq D - n - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - j_{sa}^{ik} \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D > n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - l_{k_2})!} \cdot \\
 &\frac{(n_i - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 &\frac{(j_{ik} - j_{sa} - 1)!}{(n_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 &\frac{(D - l_{sa} - l_s)!}{(D + j_{sa} - n - l_{sa} - l_s)! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
 &\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{lk}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{(j_{sa}^s)} \\
 &\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{lk} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{lk} \leq j_{ik} \leq j_{sa} + j_{sa}^{lk} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{\binom{D+l_{sa}+s-n-j_{sa}}{j_{ik}+j_{sa}-j_{sa}^{ik}-j_{sa}+1}} \sum_{j_{sa}^{ik}=j_{sa}-1}^{j_{sa}^{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=j_{sa}^{ik}-1}^{j_{sa}^{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{n_{ik}=n_{ik}-k_2-j_{ik}+1}^{(n_i-j_{ik}-j_{sa}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{\binom{D+l_{sa}+s-n-j_{sa}}{j_{ik}+j_{sa}-j_{sa}^{ik}-j_{sa}+1}} \sum_{j_{sa}^{ik}=j_{sa}-1}^{j_{sa}^{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k+j_{sa}^{ik}-j_{ik}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}$

$l_i \leq D + s - n \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + 1$

$\mathbb{k}_1 + z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is} \dots)}^{(n_{is}+1)}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{sa}-l_{k_2})} \sum_{(n_{ik} \dots)}^{(n_{ik}+1)}$$

$$\frac{(l_{sa} - l - 1)!}{(l_{sa} + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(n - l_i - j_{sa})!}{(D + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - j_{sa}^{ik}$$

$$l_{ik} - j_{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - l_i \leq D + j_{sa} + s - n - 1 \wedge$$

$$D \geq n \wedge l = l > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik} j_{sa}}^{DOST} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 &\frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
 &\frac{(l_{ik} - j_{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 &\frac{(D - j_{sa} - l_{sa} - s)!}{(D - j^{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 &\sum_{k=l}^{(l_{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 &\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa})} \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{j_{sa}^{ik} - j_{sa}^{ik}} \sum_{j_{sa} = j_{sa} - j_{sa}^{ik}}^{j_{sa} - j_{sa}^{ik}} \frac{(n_i - j_{ik} - \mathbb{k}_2 + 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}{(n_{sa} - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k}_1 = 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s - \mathbb{k}_1, j_{sa}^{ik} - \mathbb{k}_1, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2, \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{sa}+1}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} l_{ik}+j_{sa}-l-j_{sa}^{ik}+1$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{\substack{(l_{ik}-1) \\ (j_{sa}^{ik}+1)}} \sum_{\substack{l_{sa}-l+1 \\ j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜŞÜKA

$$\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{sa}=j_{sa}+1)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-\mathbb{k}_2)}^{(n_i-j_s+1)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n_i - s)!}$$

$$\frac{(l_s - l - \mathbb{k}_1)!}{(l_s + j_{sa} - j_{sa}^{ik} - \mathbb{k}_1)! \cdot (j_{sa} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l - \mathbb{k}_1)!}{(D + j^{sa} + s - n - j_{sa} - j_{sa}^{ik} - \mathbb{k}_1 - \mathbb{k}_2 - s)!}$$

$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$l_i \leq D + s - n) \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$l_i \leq D + s - n) \wedge$

$D - n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \dots)}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - \dots + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \dots - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \dots)!}$$

$$\frac{(n_{sa} - \dots)!}{(n_{sa} - j^{sa} - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

GÜLDÜŞÜMÜSÜ

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_2 : z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\ \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}+1} \sum_{(j_{sa}=j_{sa}^{ik}+2)}^{l_{sa}+1} \\
 & \sum_{n_i=n+l_{k_1}}^n \sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}+j_{ik}-l_{k_2})}^{(n_{ik}+j_{ik}-l_{k_2})} \\
 & \frac{(n_i - n_{ik} - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}{(n_{ik} - j_{sa} - l_{k_2} - 1)!} \cdot \\
 & \frac{(n_{ik} - j_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_{k_1}}^n \sum_{(n_{is}=n+l_{k_1}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s + j_{sa}^{ik} - j_{ik} - \mathbf{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j^{sa} + s - n - \mathbf{l}_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$((D \geq n < n \wedge \mathbf{l} \neq \mathbf{l}_i \wedge \mathbf{l}_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + s - n < \mathbf{l}_i \leq D + \mathbf{l}_s + s - n - 1)$$

$$(D \geq n < n \wedge \mathbf{l} \neq \mathbf{l}_i \wedge \mathbf{l}_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - n < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + s - n - 1)$$

$$D \geq n < n \wedge \mathbf{l} = \mathbf{l}_i > 0 \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbf{l}_{sa}, \dots, j_{sa}^{ik}\}$$

$$s \geq 5 \wedge \mathbf{l}_s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\mathbf{l}_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{\mathbf{l}_{sa} - \mathbf{l} + 1} \sum_{j^{sa} = \mathbf{l}_{sa} + n - D}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{n_i=n+l_k}^{(n_i-j_{ik}-l+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{sa}=n-j^{sa}+1)}$$

$$\sum_{n_i=n+l_k}^{(n_i-j_{ik}-l+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{sa}=n-j^{sa}+1)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

GÜLDÜZ

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa}^{sa})! \cdot (n - j_{sa}^{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{sa} \leq l_s \wedge$

$l_i \leq D + s - n) \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{sa} - j_{sa}^{sa} + 1 > l_s \wedge$

$l_{sa} \leq D - n - \mathbb{k}_2 - n \wedge l_i \leq (D + s - n)) \wedge$

$D \geq n < n \wedge l \neq i \wedge l_s \leq 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$\{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \binom{n_i+l_k-1}{n_i+l_k-1-j_{ik}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-l_{ik}}^{n_{ik}=n_{is}+j_{sa}^{ik}-l_{ik}} \binom{(\quad)}{n_{ik}-j_{sa}-l_{k_2}} \frac{(n_{ik}-s-l_{k_1}-l_{k_2})!}{(n_{ik}-l_{k_2})! \cdot (n-s)!}$$

$$\frac{(l_{ik} + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(l_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + \dots \leq j_{sa} \leq j_{sa} + j_{sa}^{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = l_k > \dots \wedge$$

$$j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$j_{sa}^{ik} = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right. \\
 & \left. \left(\sum_{k=l}^{j^{sa}+j_{sa}^{ik}-1} \sum_{\substack{(j_{ik}-j_{sa}^{ik}+1) \\ (n_{sa}=n-j^{sa}+1)}} \sum_{j^{sa}=j_{sa}+2}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right) \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right)
 \end{aligned}$$

GÜLDÜZMÜŞA

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{lk}+1)}^{l_{sa}-l+1} j^{sa=l_{ik}+j_{sa}-l-j_{sa}^{lk}+2} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{lk}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot \\
 & \left(\frac{(D + j_{sa} - n_{sa} - s)!}{(D + j_{sa} - n - j_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}^{lk}+j_{sa}^{lk}-j_{sa})}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{lk}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{lk}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{lk} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDEN

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

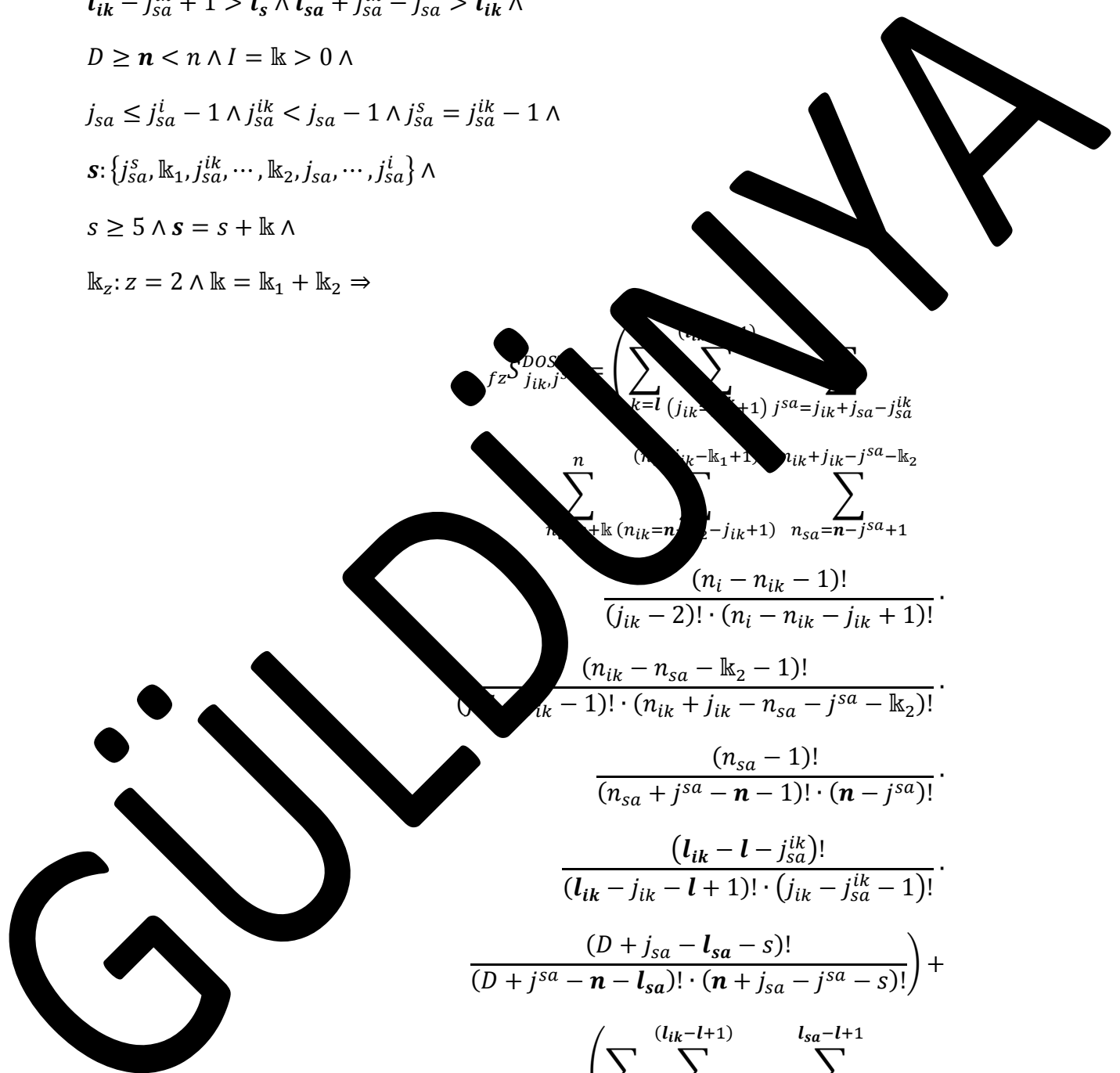
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z^s}^{j_{ik}, j_{sa}^{ik}} = \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(j_{ik}-k+1)} j^{sa=j_{ik}+j_{sa}-j_{sa}^{ik}} \right) \cdot \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(j_{ik}-k+1)} j^{sa=j_{ik}+j_{sa}-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \right)$$



$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j^{sa} - l_{sa} - j_{sa}^{ik} - 1)!}{(D + j^{sa} - n - l_{sa} - j_{sa}^{ik} - 1)! \cdot (j^{sa} - s)!} \cdot \sum_{k=j_{sa}^{ik}+1}^{j_{sa}^{ik}-l} \sum_{a=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \cdot \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$(D > n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{ik, j_{sa}^{sa}} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{sa}^{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n_i - s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n_i - s)!}$$

$$\frac{(l_s - l - \mathbb{k}_1)!}{(l_s + j_{sa}^{ik} - j_{ik} - \mathbb{k}_1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - \mathbb{k}_1 - \mathbb{k}_2)!}{(D + j_{sa}^s + s - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n_i + j_{sa} - j_{sa}^{ik} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$
- $2 \leq l \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} - 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa} + 1 > l_s \wedge l_{ik} + j_{sa} - j_{sa}^{ik} >$
- $D + j_{sa} - n < l_s \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$
- $D \geq l_s < n \wedge l = \mathbb{k}_1 + \mathbb{k}_2 \wedge$
- $j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^{ik}, j_{sa}^{ik}, \dots, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$
- $s \geq 5 \wedge s = \mathbb{k}_1 + \mathbb{k}_2 \wedge$
- $\mathbb{k}_2 = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_Z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l}^{(\quad)} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})}^{(\quad)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right. \\
 & \left. \left(\sum_{k=l}^{j^{sa}+j_{sa}^{ik}-1} \sum_{\substack{(j_{ik}-l_{k_1}+1) \\ (j_{ik}-l_{k_2}+1)}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right) \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{\substack{n_{ik}+j_{ik}-j^{sa}-l_{k_2} \\ n_{sa}=n-j^{sa}+1}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right)
 \end{aligned}$$

GÜLDÜZMÜŞA

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{lk}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{lk}+2}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{lk}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot \\
 & \left(\frac{(D + j_{sa} - n_{sa} - s)!}{(D + j_{sa} - n_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{lk}+j_{sa}^{lk}-j_{sa})}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_{ik}=n_i+j_{sa}^s-j_{sa}^{lk}-l_{k_1}}^n \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_i-j_s+1)} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{lk} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDEN

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l}^{l+1} \sum_{\substack{n_{ik}=l_{sa}+n+j \\ n_{sa}=n-j_{sa}}} \sum_{\substack{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\ n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n-j^{sa}+1}} \right) \cdot \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \left(\sum_{k=l}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{\substack{j_{sa}^{ik} \\ j_{sa}^{ik}+1}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{j_{ik}=l_{sa}}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=l_{sa}-D-j_{sa}}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
 \end{aligned}$$

GÜLDENSKYD

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - (n_i - j_s + 1))} \dots$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - k_2)} \dots$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n_i - s)!} \cdot \frac{(l_s - l + 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - 1)!}{(D + j_{sa} + s - n - j_{sa})! \cdot (n_i + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + \dots - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{ik} \leq \dots + l_s + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge l \wedge k > 0 \wedge$$

$$j_{sa} \geq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < \dots - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, \dots, k_2, j_s, \dots, j_{sa}^i\} \wedge$$

$$s \geq \dots s = s + \dots$$

$$k_z: z = 2, \dots = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_i - j_{ik} - k_1 + 1)} \dots$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\Delta} \sum_{j_{sa}^{ik} = n_{ik} + n - l_{sa} - j_{sa}^{ik}}^{\Sigma} \sum_{j_{sa}^{ik} = n + \mathbb{k}}^{\Sigma} \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{\Sigma} \sum_{k=n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{(\cdot)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{\Sigma} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq n + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{\binom{()}{(j_{sa}^s=l_i+j_{sa}-D-s)}} \sum_{\binom{()}{(l_i+j_{sa}-l-s+1)}} \sum_{\binom{()}{(j_{sa}-D-s)}} \sum_{\binom{()}{(n_i-n_{sa}-\mathbb{k}_2+1)}} \sum_{\binom{()}{(n_i-j_{ik}-\mathbb{k}_1+1)}} \sum_{\binom{()}{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}} \sum_{\binom{()}{(n_{sa}=n-j_{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{\binom{()}{(n_{sa}-n_{sa}-\mathbb{k}_2-1)}} \sum_{\binom{()}{(n_{sa}-1)}} \sum_{\binom{()}{(n_{sa}+j_{sa}-n-1)}} \sum_{\binom{()}{(n-j_{sa})}} \sum_{\binom{()}{(l_{ik}-l-j_{sa}^{ik})}} \sum_{\binom{()}{(l_{ik}-j_{ik}-l+1)}} \sum_{\binom{()}{(j_{ik}-j_{sa}^{ik}-1)}} \sum_{\binom{()}{(D+j_{sa}-l_{sa}-s)}} \sum_{\binom{()}{(D+j_{sa}-n-l_{sa})}} \sum_{\binom{()}{(n+j_{sa}-j_{sa}-s)}} \sum_{\binom{()}{(l_s+j_{sa}-l)}} \sum_{\binom{()}{(j_{sa}^s=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}} \sum_{\binom{()}{(n_i-j_s+1)}} \sum_{\binom{()}{(n_i=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})}} \sum_{\binom{()}{(n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1)}} \sum_{\binom{()}{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}} \sum_{\binom{()}{(n_i-s-\mathbb{k}_1-\mathbb{k}_2)}} \sum_{\binom{()}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)}} \sum_{\binom{()}{(n-s)}} \sum_{\binom{()}{(l_s-l-1)}} \sum_{\binom{()}{(l_s+j_{sa}^{ik}-j_{ik}-l)}} \sum_{\binom{()}{(j_{ik}-j_{sa}^{ik}-1)}}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

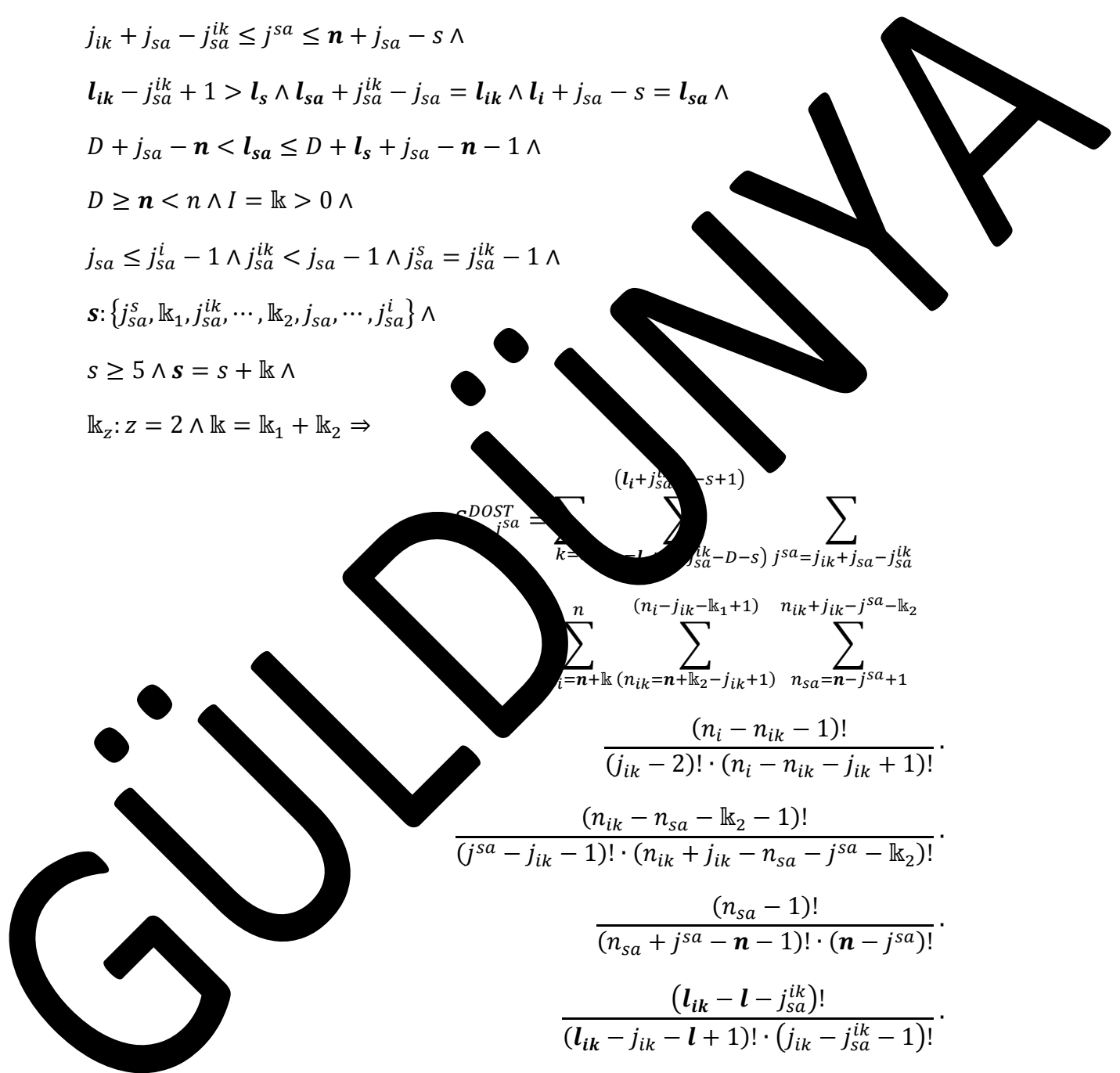
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 j_{sa}^{DOST} &= \sum_{k=1}^{(l_i + j_{sa}^{ik} - s + 1)} \sum_{j_{sa}^{ik} - D - s}^{j_{sa}^{ik} - D - s} j_{sa}^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} \\
 &\sum_{i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 &\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}
 \end{aligned}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \frac{(n_i-s-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)! \cdot (n-s)!} \cdot \frac{(l_s-l-1)!}{(l_s+j_{sa}^{ik}-j_{ik}-l)! \cdot (l_i-l-1)!} \cdot \frac{(D-l_i)!}{(D+j^{sa}+s-n-l_i-j_{sa})! \cdot (n-l_i-j^{sa}-s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i - j_{sa} - s = \dots \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + \dots + j_{sa} - n - \dots$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - \dots \wedge$$

$$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, j_{sa}^i\} \wedge$$

$$s \geq \dots \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z}^{S_{j_{ik}, j_{sa}^{ik}}} = \sum_{k=l}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{l=1}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=l}^{(j_{sa}^{ik}-l-s+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_{sa}-j_{ik}+1)}^{(n_i-j_{ik}-1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_{sa}^{ik}=l}^{(j_{sa}^{ik}+2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

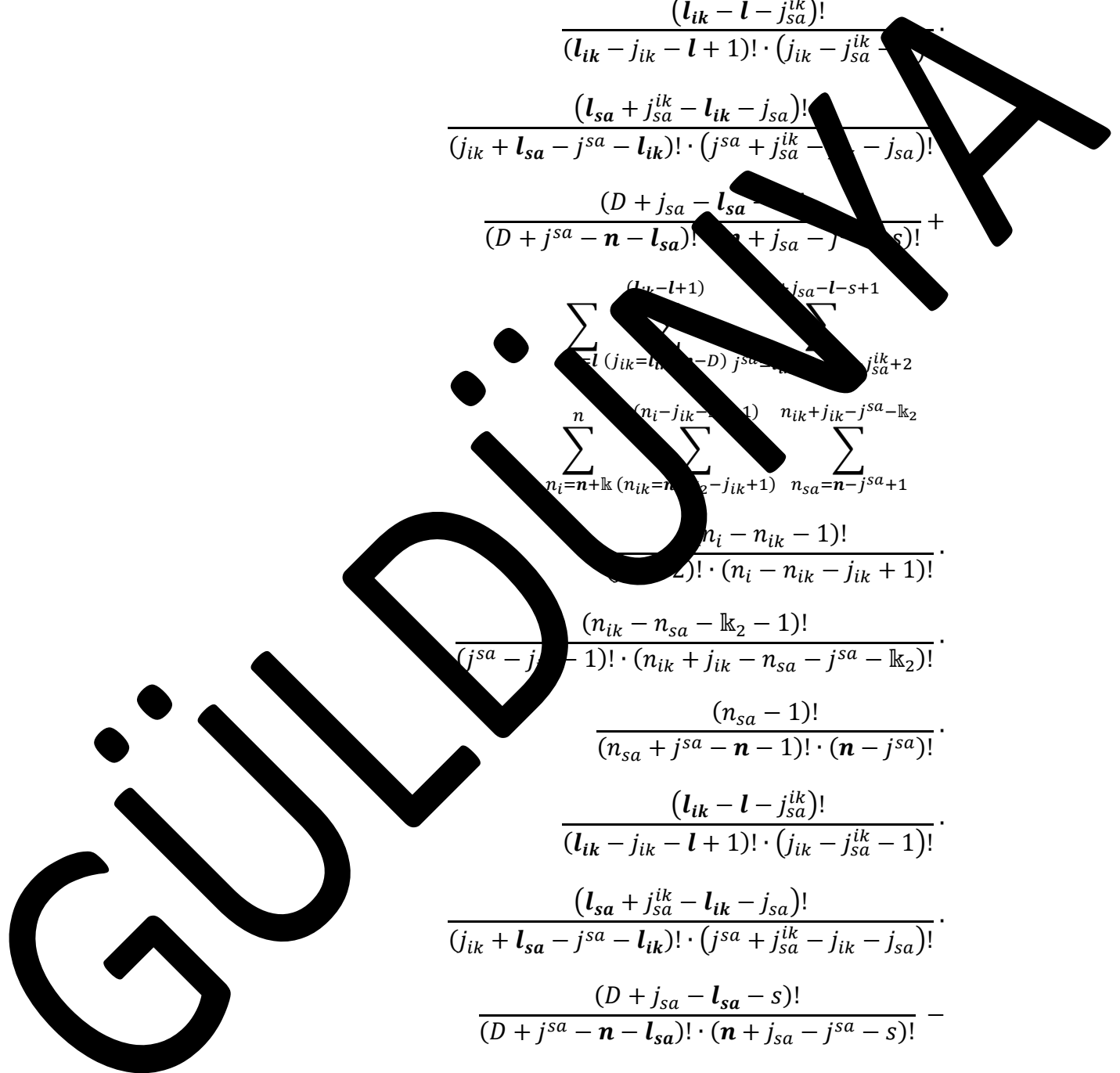
$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}^{ik}=l_{sa}+n-D}^{(l_s+j_{sa}-l)}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{lk}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i - j_{sa} - s = \dots \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + \dots + j_{sa} - n - \dots$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{lk} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - \dots \wedge$$

$$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{lk}, \mathbb{k}_2, j_{sa}^{ik}, j_{sa}^i\} \wedge$$

$$s \geq \dots \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}}^{DOST}} = \sum_{k=l}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{j_{ik}=l_i}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-s}^{l_i+j_{sa}-l-s+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_{sa}-j_{ik}+1}^{(n_i-j_{ik}-1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_i - n_{ik} - j_{ik} + 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-j_{sa}}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

GÜLDENWA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^i-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^i)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^i + s - n - l - j_{sa}^i)! \cdot (n - j_{sa}^i - j_{sa}^i - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa}^i \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^i \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^i = l_{ik} \wedge l_i + j_{sa}^i - s > j_{sa}^i \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa}^i \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^i \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^i = l_{ik} \wedge$$

$$(l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \rightarrow j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^i, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{sa}=j_{sa}+1)}^{l_{sa}-l+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - l_{k_2})!} \cdot \\
 &\frac{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 &\frac{(D - j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
 &\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{sa}=j_{sa}+1)}^{l_s+j_{sa}-l} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \\
 &\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} = \sum_{k=1}^n \sum_{j_{ik}=j}^{\binom{l_{sa}-l+1}{j_{ik}}} \sum_{j_{sa}^a=j_{sa}+1}^{\binom{l_{sa}-l+1}{j_{sa}^a}} \sum_{n_i=n+k}^n \sum_{n_{ik}=\binom{k_2-j_{ik}+1}{j_{ik}}}^{\binom{n_i-j_{ik}+1}{j_{ik}}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{n_{ik}+j_{ik}-j_{sa}-k_2}{j_{sa}^a}} \frac{(n_i - n_{ik} - 1)!}{(j_{sa} - j_{sa}^a - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^a - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^n \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{l_s+j_{sa}-l}{j_{sa}^a}} \sum_{j_{sa}^a=l_i+n+j_{sa}-D-s}^{\binom{n_i-j_s+1}{j_{sa}^a}} \sum_{n_i=n+k}^n \sum_{n_{is}=\binom{n+k+j_{sa}^{ik}-j_{ik}}{j_{sa}^a}}^{\binom{n_i-j_s+1}{j_{sa}^a}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$((D \geq n < n \wedge l \neq i) \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n \vee$

$(D \geq n < n \wedge l \neq i) \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n \vee$

$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$

$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s - \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s \leq s + \mathbb{k} \wedge$

$\mathbb{k}; z = 2; \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_s - l - j_{sa} - s)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (n - j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik})} \sum_{(j_{ik}=l_i + n_{ik} - D - s)}^{(j_{ik} - l_i + n_{ik} - D - s)} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}}^{(j_{ik} - l_i + n_{ik} - D - s)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$(n_i - s - l_{k_1} - l_{k_2}) < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{(j_{sa}^{ik} + j_{sa}^{ik} - j_{sa})} \sum_{j_{sa} = l_{sa} + n - D}^{l_s + j_{sa} - l} \\ & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \\ & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} j^{sa} = l_s + j_{sa} - l + 1 \\
 & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 & \sum_{k=l}^{()} \sum_{(j_{ik} = j_{sa}^{ik} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_i + n + j_{sa} - D - s} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^n \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{(n_i - j_s + 1)} \\
 & \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜZ

$$\left((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s - l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} \sum_{z \in \mathcal{DOST}} j_{ik} j_{sa}^{sa} &= \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \end{aligned}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{l - l + 1} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{n_{ik} = j_{ik} + 1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa}^{ik} - k_2}$$

$$\frac{(n_i - n_{ik})!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{ik} = l + n + j_{sa}^{ik} - D - s}^{(l_{ik} - l + 1)} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{n_{is} = n + k + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{()} \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2}^{()}$$

GÜLDÜZMAYA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik})!}$$

$$\left((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} - j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(n_{is}=n+l+k+j_{sa}^{ik}-j_{ik})}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq l_i < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + 1$$

$$k: z = 2 \wedge k = k_1 + 1 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}-1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-s) \cdot j_{sa}^{ik}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-l+1)} \sum_{(n_i=n+l_{sa}+j_{sa}^{ik}-j_{ik}-l+1)}^{(n_i-j_{ik}-l+1)} \sum_{(n_{ik}=n+l_{sa}+j_{sa}^{ik}-j_{ik}-l+1)}^{(n_{ik}+j_{ik}-l_{sa}-l+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}+j_{ik}-l_{sa}-l+1)} \frac{(n_i - n_{ik} - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{sa} - 1)!} \cdot \frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j_{sa}^{ik}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_s+j_{sa}^{ik}-l)} \sum_{n_i=n+l_{sa}}^n \sum_{(n_{is}=n+l_{sa}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)}$$

GÜLDENWA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$\left((D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - j_{sa}^{ik} - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\binom{()}{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}} \sum_{\binom{()}{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}} \\
 &\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{ik}=n+l_{k_2}-j_{ik}+1}} \sum_{\binom{()}{n_{sa}=n-j_{sa}}} \sum_{\binom{()}{j_{sa}-l_{k_2}}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - l_{k_2})!} \cdot \frac{(n - n_{sa} - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(j_{ik} - n_{sa} - 1)!}{(n - j_{ik} - 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \frac{(D - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!} \\
 &\sum_{k=l} \sum_{\binom{()}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\binom{()}{j_{sa}=l_i+n+j_{sa}-D-s}} \sum_{\binom{()}{l_s+j_{sa}-l}} \\
 &\sum_{n_{ik}=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k+j_{sa}^{ik}-j_{ik}}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2}}} \\
 &\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l = i_l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=i}^n \sum_{j_{ik}=j_{sa}^{ik}}^{(j_{ik}-k)} \sum_{j_{sa}=j_{sa}^{ik}}^{(n-j_{sa}-k)} \right) \cdot \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} + \left(\sum_{k=i}^n \sum_{j_{ik}=j_{sa}^{ik}}^{(j_{ik}-k)} \sum_{j_{sa}=j_{sa}^{ik}}^{(l_{sa}-k+1)} \right) \sum_{n_i=n+k}^n \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_k \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n_{k_1+1})} \sum_{n_{sa}=n+k_1+j_{ik}-j_{sa}-k_2}^{(n_{ik}-s-k_1-k_2)} \frac{(n_i - s - k_1 - k_2)!}{(n_i - l_{ik} - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l = l \wedge l_s \leq D$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa}$

$l_{ik} - k_1 + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} =$

$l_{ik} \leq D + j_{sa}^{ik} \wedge l_i \leq D + s - n$

$D \geq n < n \wedge l = l \wedge l_s \leq D$

$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}^{ik}, j_{sa}^i, \dots, j_{sa}^i\} \wedge$

$s \geq 5 \wedge s \leq s + k \wedge$

$z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=j_{sa}}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^i)!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} - s)!}{(l - j^{sa} - n - l_s)! \cdot (n - l_s - s)!}$$

$$\sum_{k=i}^{()} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq l_i \wedge n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa}^i \wedge$$

$$j_{ik} - j_{sa}^i - j_{sa}^{ik} \leq j_{sa}^i \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_s \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^i = l_{ik} \wedge$$

$$l_s \geq 1 \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik} j^{sa}}^{DOST} = \sum_{k=i}^{\binom{D}{i}} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{D}{i}} \sum_{j^{sa}=j_{sa}}^{l_{sa}-i+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{\binom{D}{i} - j_{ik} - \mathbb{k}_1 + 1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \dots)}{(j_{ik} - 2)! \cdot (n - n_{ik} - \dots + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \dots - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \dots)!}$$

$$\frac{\binom{n_{sa} - \dots}{n_{sa} - j^{sa} - \dots - 1}}{(n_{sa} - j^{sa} - \dots - 1)! \cdot (n - j^{sa})!}$$

$$\frac{\binom{l_{ik} - \dots - l - j_{sa}^{ik}}{(l_{ik} - j_{ik} - \dots - l + 1) \cdot (j_{ik} - j_{sa}^{ik} - 1)!}}{\frac{\binom{D}{i} (j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}}$$

$$\sum_{k=i}^{\binom{D}{i}} \sum_{j_{ik}=j_{sa}}^{\binom{D}{i}} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{\binom{D}{i}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n, l = i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^n \sum_{l=j_{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{D+l-j_{sa}-i^l-j_{sa}^{ik}}{j_{sa}^{ik}-j_{sa}^i}} \sum_{j_{sa}^s=j_{sa}}^{l_{ik}+j_{sa}-i^l-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{sa}^{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \cdot \sum_{k=i}^n \sum_{l=j_{sa}+j_{sa}^{ik}}^{\binom{D+l-j_{sa}-i^l-j_{sa}^{ik}}{j_{sa}^{ik}-j_{sa}^i}} \sum_{j_{sa}^s=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{\binom{D+l-j_{sa}-i^l-j_{sa}^{ik}}{j_{sa}^{ik}-j_{sa}^i}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

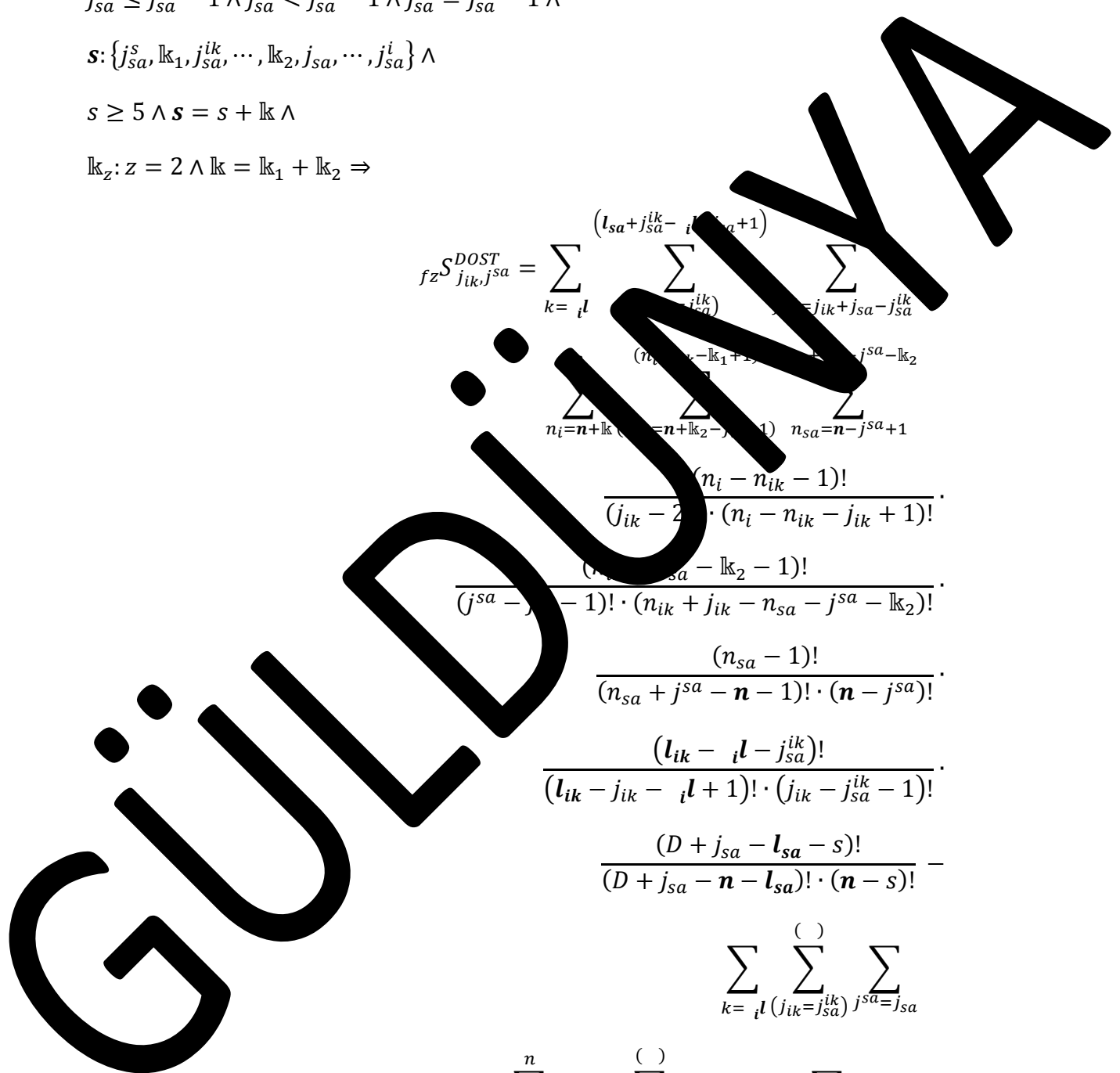
$$s \geq 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=i}^{(l_{sa} + j_{sa}^{ik} - i^{l_{sa} + 1})} \sum_{j_{sa}^{ik}}^{(j_{sa}^{ik})} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(j_{sa} - k_2)} \sum_{n_i = n + k}^{(n_i - k_1 + 1)} \sum_{n_{sa} = n + k_2 - j_{sa} + 1}^{(n_{sa} - j_{sa} + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{sa} - 1)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \cdot \sum_{k=i}^{()} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{j_{sa} = j_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n_i - j_{ik} - k_1 + 1)}^{()} \sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2}^{(n_i - s - k_1 - k_2)!} \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!}$$



$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{DOST} = \sum_{k={}_i l}^{(l_{ik} - j_{sa}^{ik})} \sum_{l={}_i l}^{(l_{ik} - j_{sa}^{ik})} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik} - j_{sa}^{ik})} \sum_{n=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_{ik}+j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k={}_i l}^{(\)} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\)} \sum_{j_{sa}=j_{sa}}^{(\)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

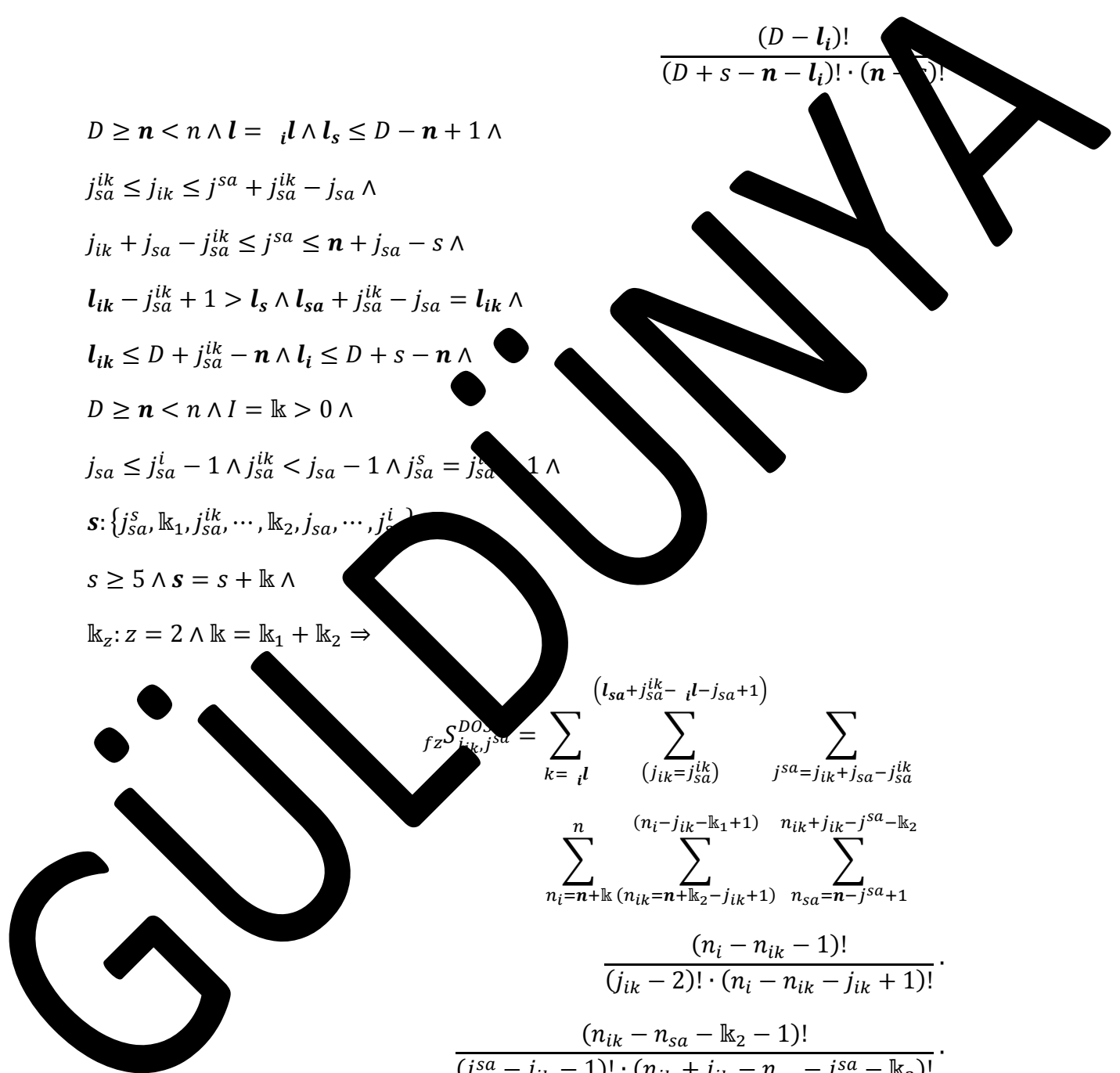
$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{i_{ik}, j_{sa}}^{DOS} = \sum_{k=i}^l \sum_{\binom{()}{j_{ik}=j_{sa}^{ik}}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \frac{\binom{l_{sa}+j_{sa}^{ik}-i-l-j_{sa}+1}{(j_{ik}=j_{sa}^{ik})}}{\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}} \sum_{n_{sa}=n-j^{sa}+1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$



$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{\binom{()}{n_{sa}=n_{ik}}}$$

$$\frac{(n_i - s - l_{k_1} - \dots)!}{(n_i - n - l_{k_1})! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - \dots - l_i)! \cdot (n - \dots)!}$$

$$((D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$(j_{sa} \leq D - j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \geq 5 \wedge s = s + l_k \wedge$$

$$s \geq 5 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}^{(l_{ik}-i^{l+1}) l_{sa}-i^{l+1}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \\
 &\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - l_{k_2})!} \cdot \\
 &\frac{(n_i - 1)!}{(n_i - j_{sa} - n + 1)! \cdot (n - j_{sa})!} \\
 &\frac{(l_{ik} - i^{l+1} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(l_{sa} + j_{sa} - l_{ik} - 1)!} \cdot \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
 &\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}^{()} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2}}^{()} \\
 &\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \\
 &\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l = i^l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{zS}^{DOST}_{j_{ik}j_{sa}} = \left(\sum_{k=i}^n \sum_{l=i}^n \binom{l_{ik}+j_{sa}-i^l-j_{sa}^{ik}+1}{j_{sa}^{ik}-j_{sa}^{ik}+1} \right) \cdot \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik})!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(j_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \Bigg) + \left(\sum_{k=i}^n \sum_{l=i}^n \binom{(j_{sa}+j_{sa}^{ik}-j_{sa}-1) l_{ik}+j_{sa}-i^l-j_{sa}^{ik}+1}{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}+1} \right) \cdot \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=i^l}^{l_{ik}-i^{l+1}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}-i^l-j_{sa}^{ik}+2}^{l_{sa}-i^l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_{sa}-j_{ik}-j_{sa}-\mathbb{k}_2}^n \sum_{(n_{ik}=n+l_{sa}-j_{ik}-j_{sa}-\mathbb{k}_2+1)}^{n_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}-j_{sa}+1} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=i^l}^{(\cdot)} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\cdot)} \sum_{j^{sa}=j_{sa}}^{(\cdot)} \\
 & \sum_{n_i=n+l_{sa}-j_{ik}-j_{sa}-\mathbb{k}_2}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\cdot)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\cdot)}
 \end{aligned}$$

GÜLDENYA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) +$$

$$\begin{aligned}
 & \left(\sum_{k=i^l}^{(l_{ik}-i^{l+1})} \sum_{(j_{ik}=j_{sa}^{ik})}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1} \right. \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})} \cdot \\
 & \frac{(l_{ik} - i^{l+1} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=i^l}^{(\)} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\)} \sum_{j^{sa}=j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\)} \\
 & \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=0}^{\binom{()}{i}} \sum_{l(j_{ik}=j_{sa}^i)} \sum_{j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{n_i-j_{ik}-\mathbb{k}_1+1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{j_{sa}+1}^{j_{sa}+1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \sum_{k=0}^{\binom{()}{i}} \sum_{l(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{\binom{()}{i}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\left((D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = l_i \wedge l_s > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s: 5 \wedge s = l_{k_1} + l_{k_2} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=1}^n \sum_{i=1}^{\binom{l_{sa}-l+1}{j_{ik}=j_{sa}^{ik}}} \sum_{j_{sa}=j_{sa}}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_{k_1}}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k_1=1}^{(n_{sa})} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{s_{sa}=j_{sa}} \sum_{n_i=n+k_1}^n \sum_{(n_{ik}=n-k_1+1)}^{(n_{sa})} \sum_{(n_{sa}=n-k_1+k_2)} \frac{(n_i - k_1 - k_2)!}{(n_i - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(n + s - n - l_i)! \cdot (n - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1) \wedge (l_s > l_{sa} - j_{sa}^{ik} + 1) \wedge \\ & 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 \leq l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee \\ & ((D \geq n < n \wedge l_s > D - n + 1) \wedge (l_s > l_{sa} - j_{sa}^{ik} + 1) \wedge \\ & 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & (l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge \end{aligned}$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{jik, j^{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\left. \frac{(D + j_{sa} - n - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left(\sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \right.$$

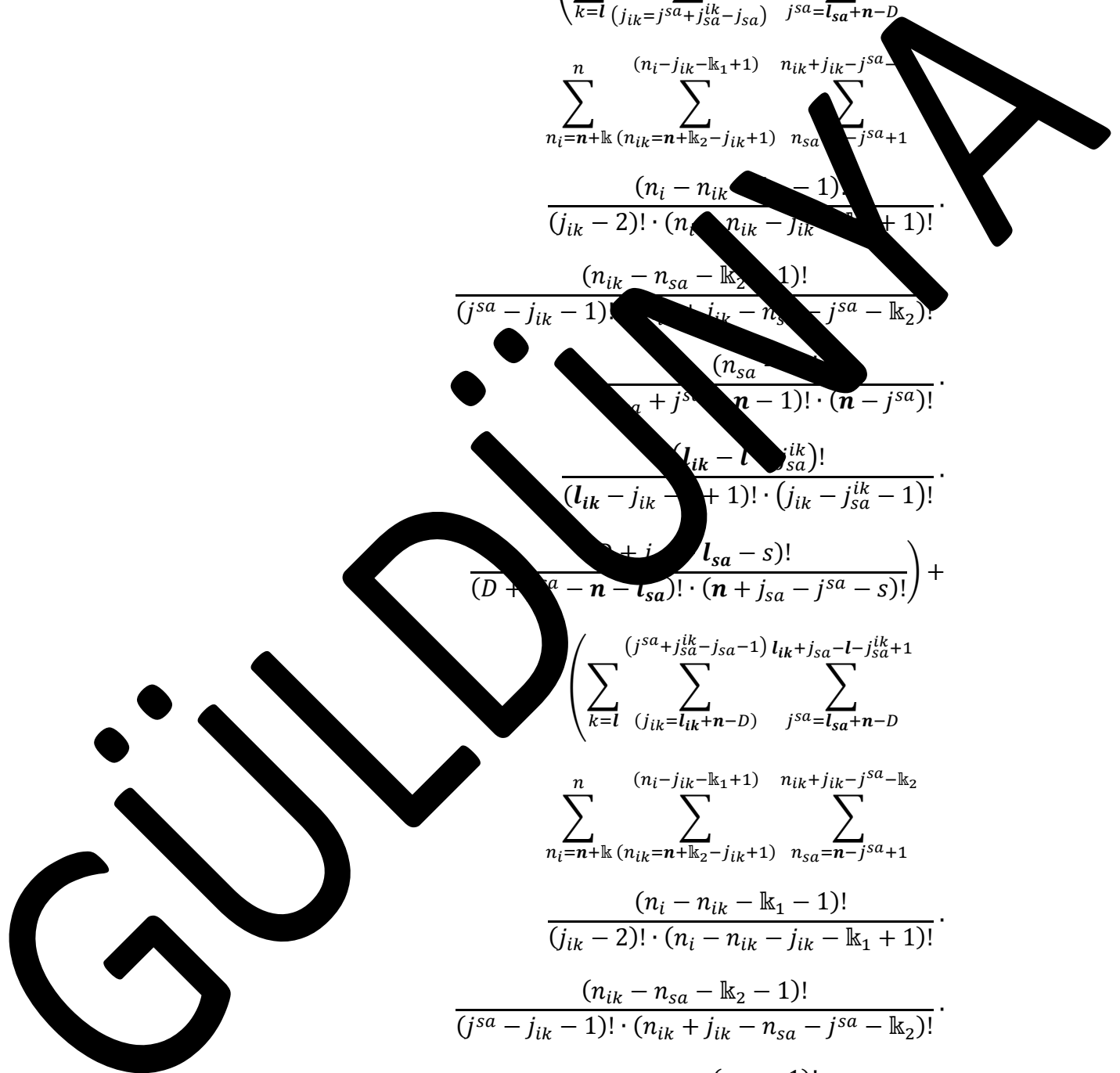
$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$



$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \sum_{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n+l_k-j_{sa}^{ik}+1}^{n_{ik}+j_{sa}-l-j_{sa}^{ik}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - l_{k_1} - 1)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - l_{k_2} - 1)! \cdot (n_{ik} - n_{sa} - j_{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!}$$

GÜLDÜZMAYA

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

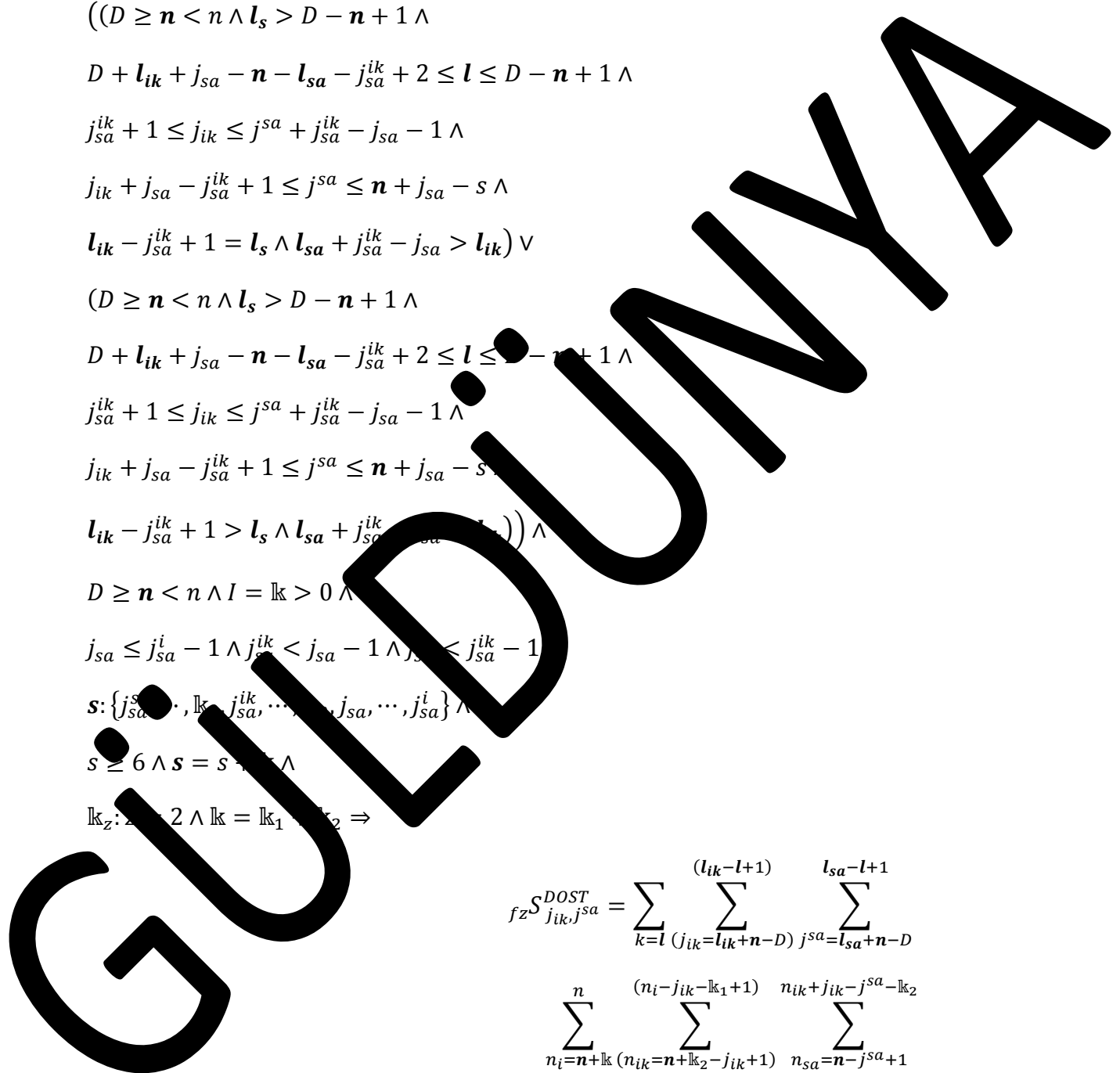
$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1$

$s: \{j_{sa}^{sa}, \dots, \mathbb{k}_2, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s_1 \wedge$

$\mathbb{k}_2: 2 \leq \mathbb{k}_2 \wedge \mathbb{k} = \mathbb{k}_1 \vee \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$



$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(l_i=n+l_{sa}-D+l_{sa}+j_{sa}+1)}^{()} \sum_{(n_{is}=n+l_{sa}+j_{sa}^{ik}-j_{ik})}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned} & ((D \geq l_i < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge \\ & j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \end{aligned}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \Big) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{ik}-l+1)} \right. \\ \left. \sum_{(n_i=n+\mathbb{k}_1)}^{(n_i=n+\mathbb{k}_1-1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{sa}=n-j_{sa}+1)} \right. \\ \left. \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right. \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\ \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{sa}-l+1)} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \right. \\ \left. \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \right. \\ \left. \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \right)$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik+1}}^{l_{sa}-l+1} \frac{(n_i - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_{sa}^{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!}{(n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_i - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_{sa}^{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}-D-s}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
 \end{aligned}$$

GÜLDÜZ

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik}$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} -$

$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$

$s \geq 1 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z^{S_{j_{ik}, j_{sa}^{ik}}} = \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}^s=l_{sa}+n-D}^{l_s+j_{sa}-l} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - l + 1)} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-1)} \sum_{j^{sa}=l_{sa}+n} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(j_{ik}-1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{n} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(l_{sa}+j_{sa}^{ik}-l)} \sum_{j^{sa}=l_{sa}+n-D}^{n+1} \\
 & \sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{k=l}^{n} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(l_{sa}+j_{sa}^{ik}-l)} \sum_{j^{sa}=l_{sa}+n-D-s}^{l_{sa}+j_{sa}^{ik}-l}
 \end{aligned}$$

GUIDANCE

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq D - n +$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik}$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} -$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq \mathbb{k} \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z: z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} \cdot \sum_{j_{ik}=l_i+n_{ik}-D-s}^{(1+j_{sa}^{ik}-l)} \sum_{n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik}}^{n} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(n_i-j_s+1)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D > n \wedge l_s > D - n + 1 \wedge$
- $2 \leq l \leq D - j_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$
- $j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} j_{sa} = j_{sa} - j_{sa}^{ik} \right. \\ \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1)} \sum_{n_{sa} = n - j_{sa}^{ik} - \mathbb{k}_2}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \\ \frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ \left. \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left(\sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D} \right. \\ \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \\ \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \\ \left. \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - j_{sa})}^{l_{sa} + 1} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1)} \\
 & \sum_{n_i = n + k}^n \sum_{(n_i - j_{ik} - k_1 = j_{ik} + 1)}^{(n_i - j_{ik} - k_1 - 1)} \sum_{(n_{sa} = n - j_{sa} + 1)}^{n_{ik} + j_{ik} - k_2} \\
 & \frac{(n_{ik} - j_{ik} - k_1 - 1)!}{(j_{ik} - k_1 - 1)! \cdot (n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - j_{ik} - k_2 - 1)!}{(j^{sa} - k_2 - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{(\quad)}
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{k=l}^n f_z^{DOST} S_{j_{ik}, j_{sa}}^{DOST} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

GÜLDÜNYA

$$\sum_{k=l} \binom{()}{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}} j^{sa=l_i+n+j_{sa}-D-s} \sum_{n_i=n+lk}^n \sum_{n_{is}=n+lk+j_{sa}^{lk}-j_{sa}}^{(n_i-j_s+1)} \binom{()}{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}} \frac{(n_i - s - \mathbb{k}_1)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n_i - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{sa}^{lk} - l)! \cdot (j_{sa} - j_{sa}^{lk} - 1)!} \cdot \frac{(D - s)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{lk} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{lk} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{lk} \leq j^{sa} \leq n - j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{lk} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} = l_{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k}_1 = 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1, j_{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{lk} - 1 \wedge$

$s: \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{lk}, \dots, j_{sa}, \dots, j_{sa}^s\} \wedge$

$\geq 6 \wedge s = s + \mathbb{k}_1 \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \binom{()}{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}} j^{sa=l_{ik}+n+j_{sa}-D-j_{sa}^{lk}} \sum_{n_i=n+lk}^n \sum_{n_{ik}=n+lk_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}, n_{sa}=l_i+n+j_{sa}-D)}$$

$$\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}, n_{sa}=l_i+n+j_{sa}-D)}$$

$$\sum_{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n \wedge n \wedge l_s > D - 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} < j^{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa})} \sum_{(j_{ik} = l_i + n - j_{sa}^{ik})} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{n_i = n + k}^n \sum_{(n_{ik} = n_{ik} - k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2} \frac{(n_i - j_{ik} - k_1 - 1)!}{(j_{ik} - k_1)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} -$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{z, S, D, T}^{j_{sa}^{ik}} = \sum_{k=l} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \frac{(j^{sa}+j_{sa}^{ik}-j_{sa})}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{l_s+j_{sa}-l}{(n_{sa}=n-j^{sa}+1)} \cdot \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{sa} - 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D)}^{l_i + j_{sa} - l - s + 1} \sum_{(j_{sa} = l_s + j_{sa}^{ik} - l + 1)} \\
 & \sum_{n_i = n + k}^n \sum_{(n_i - j_{ik} = k - 1)}^{(n_i - j_{ik} - 1)} \sum_{(n_{ik} + j_{ik} = n - j_{sa} + 1)}^{n_{ik} + j_{ik} - k_2} \\
 & \frac{(n_{ik} - j_{ik} - k_1)!}{(j_{ik} - k_1)! \cdot (n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - j_{ik} - k_2)!}{(j^{sa} - k_2 - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_{sa} + n - D} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{()}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

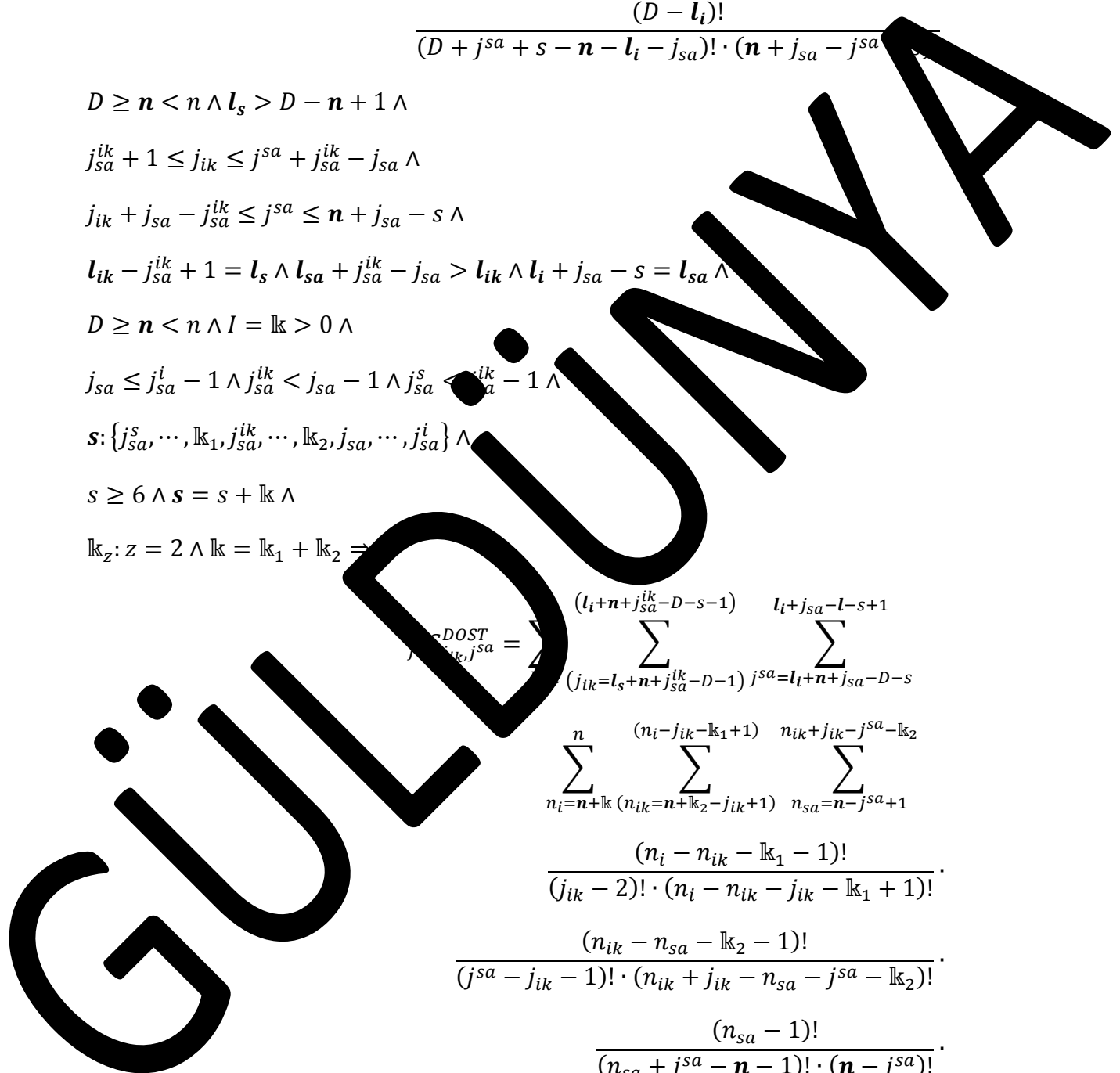
$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{ik}^{DOST} = \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{j_{sa}^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$



$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{l_i + j_{sa} - l - s + 1} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - k_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - k_2 - 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - k_1 + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa}^{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})}^{(l_{ik} - l + 1)} j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + 1 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{l_{sa}}{j_{sa}^{sa} - l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_{sa} - l} \dots$$

- $(D \geq n < n + 1 \wedge l_s > D - n + 1 \wedge j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$
- $(D \geq n < n + 1 \wedge l_s > D - n + 1 \wedge j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$
- $(D \geq n < n + 1 \wedge l_s > D - n + 1 \wedge j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa}^{ik} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(n_i - j_s + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n_i - j_s + 1)}$$

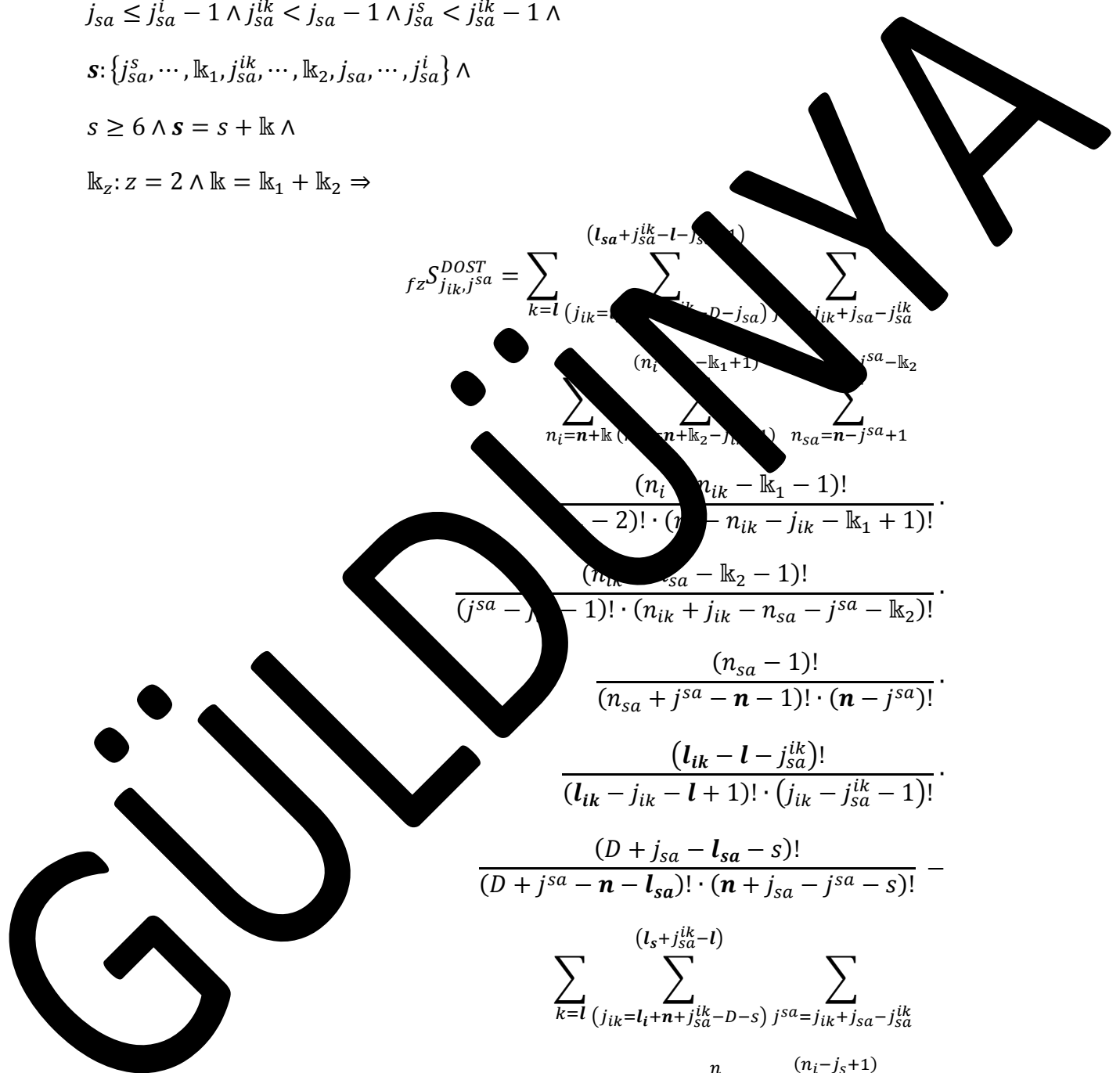
$$\sum_{n_i = n + \mathbb{k}}^{(n_i - \mathbb{k}_1 + 1)} \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - \mathbb{k}_2 - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{sa} - \mathbb{k}_2 - 1)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_i - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(n_i - j_s + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(n_i - j_s + 1)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{(\quad)}$$



$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1, j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^l\}$$

$$s_1 = 6 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \frac{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{l_{sa}}{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{sa}-l} \sum_{(n_i=n+l_k)}^{n+l_k+j_{sa}^{ik}-j_{ik}} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1})}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \frac{(n_i - l_{k_1} - l_{k_2})!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$(D \geq n < n) \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} + j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$

$(D \geq n < n) \wedge l_s > D - n + 1 \wedge$

$j_{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j_{sa}^{ik}-1)}^{(n_{ik}+j_{ik}+j_{sa}-\mathbb{k}_2)} \frac{(n_{ik}-l+1)!}{(j_{ik}-2)! \cdot (n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \frac{(n_{sa}-n_{ik}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}+n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \cdot \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)} \frac{(n_i-s-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)! \cdot (n-s)!} \cdot \frac{(l_s-l-1)!}{(l_s+j_{sa}^{ik}-j_{ik}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{sa}^{D-s} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1 \sum_{j^{sa} = l_i + n + j_{sa} - D - s}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_{is}=n+l_k-j_{sa}^{ik}+1)}^{n_{ik}+j_{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - l_{k_1} - 1)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{is} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - l_{k_2} - 1)! \cdot (n_{ik} - n_{is} - j_{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} \sum_{j_{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}$$

$$\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!}$$

GÜLDÜZMAYA

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

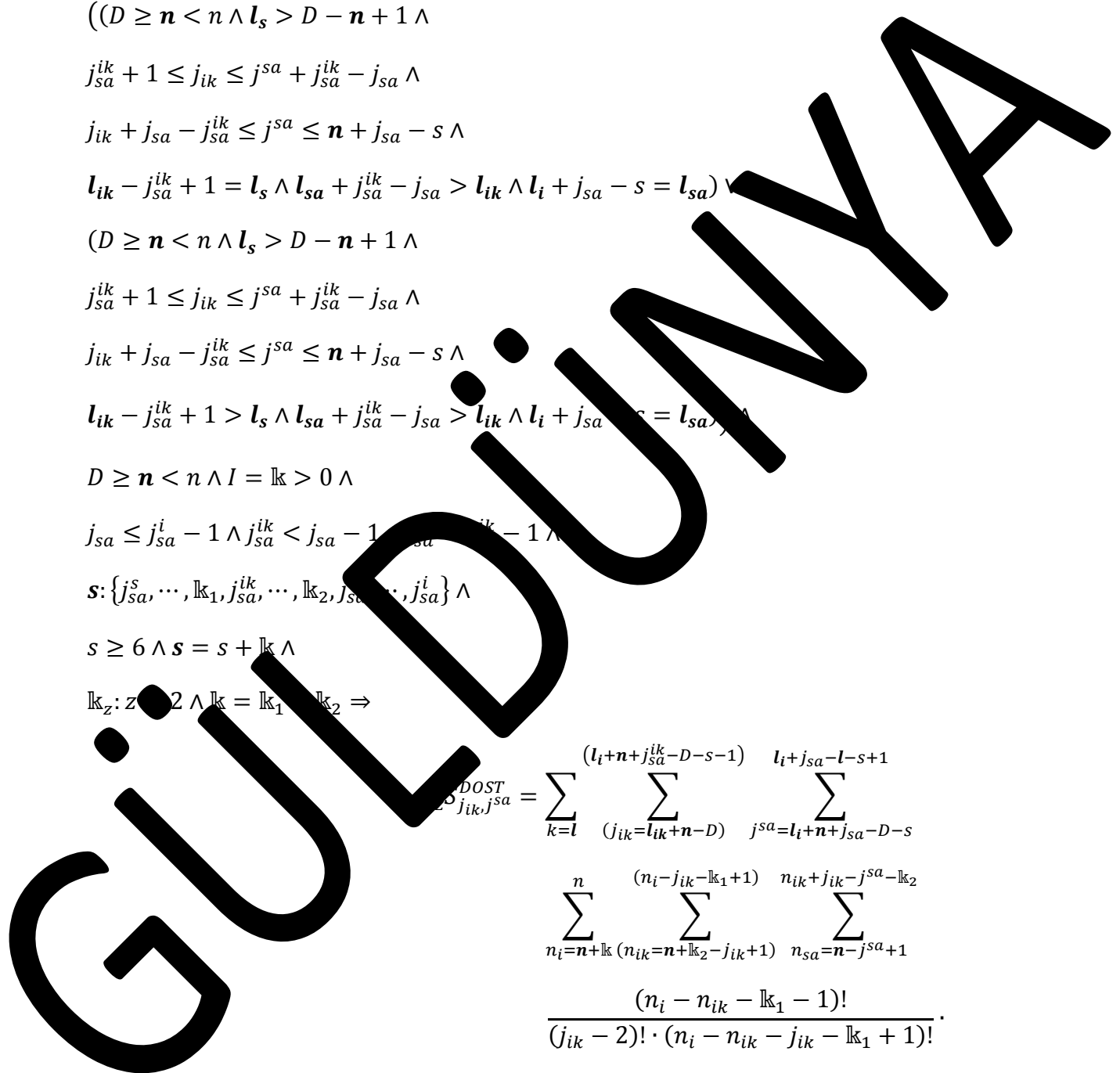
$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{k=l}^{DOST} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$



$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-l_{sa}-j_{sa}^{ik})}^{(l_i+l-s+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{n_i=n+l_{sa}+k}^n \sum_{(n_i-j_{ik}+1)}^{(n_{ik}+j_{ik}-l_{sa}-k_2)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-l_{sa}-k_2)} \frac{(n_{ik}-j_{ik}-k_1+1)!}{(j_{ik}-k_1-2)! \cdot (n_{ik}-n_{ik}-j_{ik}-k_1+1)!} \cdot \frac{(n_{ik}-n_{sa}-k_2+1)!}{(j^{sa}-k_2-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \frac{(n_{sa}-1)!}{(j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{n_i=n+l_{sa}+k}^n \sum_{(n_{is}=n+l_{sa}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()}$$

GÜLDÜZ

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_{z^S} S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j^{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \\
 &\sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
 &\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j^{sa} - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = l_{ik} + n - D)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
 &\sum_{n_i = n + l_k}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \\
 &\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i+l_k-j_{ik})}^{(n_i+l_k+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-l_{ik}}^{()} \sum_{(n_{ik}-j^{sa}-l_{k_2})}^{()} \frac{(n-s-l_{k_1}-l_{k_2})!}{(n-s-l_{k_2})! \cdot (n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot (l_i)! \cdot (D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!$$

- $((D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z_{sa}^{POST}} = \sum_{k=l}^{n+n+j_{sa}^{ik}-j_{sa}-1} \sum_{(j_{ik}+k+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{n_{sa}=n-j^{sa}+1} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 & \sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}}^n \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_i-j_s+1)} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDEN

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{zS}^{DOS1} = \sum_{k=l}^n \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(j_{ik}-k_1+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{sa}=n-j_{sa}+1)} \frac{(n_{sa}-l+1)! \cdot (n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \cdot \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} -$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$OST_{j_{ik}, j_{sa}} = \sum_{k=l} \sum_{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_i + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + k}^{(n_i = n + 1)} \sum_{(n_{is} = n - k)} \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - k_1)} \sum_{(n_{ik} = n_{is} - j_{sa} - k_2)} \frac{(n_i - s - k_1 - k_2)!}{(n - n_{is} - k_2)! \cdot (n - s)!} \cdot \frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} - l_i)!}{(D + j^{sa} + n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - j_{sa}^{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k > n \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$j_{sa}^{ik} = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_i + j_{sa} - l - s + 1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_i - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_s - l - j_{sa} - s)!}{(l_s + j_{sa} - n - 1)! \cdot (n - j_{sa} - s)!} \cdot \\
 & \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \\
 & \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$l_s \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \dots$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}^{(n_i - j_{ik} + 1)} \sum_{(n_{sa} = n - j_{sa} + 1)}^{(n_{sa} + j_{ik} - \mathbb{k}_2)}$$

$$\frac{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}{(j_{sa}^{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 + 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \dots$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{is} = n + \mathbb{k}_1 + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 \vee \mathbb{k}_2 \Rightarrow$$

$$f_Z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}^{n_i - j_{ik} - \mathbb{k}_1 + 1} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_i - n_{ik} - \mathbb{k}_1 - 1)!} \cdot \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D, \dots, j_{sa} = l_s + j_{sa}^{ik} - l + 1)} \\
 & \sum_{n_i = n + k}^n \sum_{(n_i - j_{ik} = \dots, n_{ik} + j_{ik} = \dots, k_2)} \sum_{(n_i = n - j^{sa} + 1)} \\
 & \frac{(n_{ik} - j_{ik} - k_1)! \cdot (n_{ik} - j_{ik} - k_1 + 1)!}{(j_{ik} - k_1)! \cdot (n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - j_{ik} - k_2)!}{(j^{sa} - k_2 - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(\dots)} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j^{sa} = l_i + n + j_{sa} - D - s)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa} - k_1}^{(\dots)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{(\dots)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$

$(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1, j_{sa}^s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^l\}$

$s = 6 \wedge s = \dots + \mathbb{k} \wedge$

$\mathbb{k}_z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = l_s + n + j_{sa}^{ik} - D - 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}} \dots$$

$$\frac{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} - l_{k_1} + 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{(l_{ik} - l + 1)} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{j_{sa}^{ik} = j_{ik} + j_{sa} - j_{sa}^{ik}} \dots$$

$$\sum_{n_i = n + l_k}^n \sum_{(n_{is} = n + l_k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

GÜLDÜZMAYA

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > j_{ik} \wedge$

$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + 1$

$\mathbb{k}_1 + z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{ik}=j_{sa}^{ik} - l_s + k}^{j_{ik} - l + 1} \sum_{j_{sa}=l_s + j_{sa}^{ik} - k}^{j_{sa} - l + 1} \sum_{n_i=n+l_{ik}}^n \sum_{n_{ik}=n+l_{ik}-j_{ik}+1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa}=n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - l_{k_2}} \frac{(n_{ik} - n_{sa} - l_{k_1})!}{(j_{ik} - l_{k_1} - 1)! \cdot (n_{ik} - n_{sa} - j_{ik} - l_{k_1} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - l_{k_2})!}{(j^{sa} - l_{k_2} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{()} \sum_{j_{ik}=j^{sa} + j_{sa}^{ik} - j_{sa}}^{l_s + j_{sa} - l} \sum_{j_{sa}=j_{sa} + 1}^{l_s + j_{sa} - l} \sum_{n_i=n+l_{ik}}^n \sum_{n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik}}^{(n_i - j_s + 1)} \sum_{n_{ik}=n_{is} + j_{sa}^s - j_{sa}^{ik} - l_{k_1}}^{()} \sum_{n_{sa}=n_{ik} + j_{ik} - j^{sa} - l_{k_2}}^{()}$$

GÜLDÜZMAYA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}^{ik}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{sa} + 2} \right. \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\cdot)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k})}^{(n_{is}+1)} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1)}^{(n_{ik}+1)} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_2)}^{(\cdot)} \frac{(n_{ik} - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_{ik} - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(n_{ik} - l - 1)!}{(j_{ik} + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(n_{ik} - l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$
- $j_{ik}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} + \dots < j_{sa} \leq \dots + j_{sa} - s \wedge$
- $l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $l_{sa} \leq D + j_{sa} - n \wedge$
- $D > n < n \wedge I = \mathbb{k} > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
- $s \in \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$
- $s \geq 6 \wedge s = s + \mathbb{k} \wedge$
- $\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
f_z S_{j_{ik} j_{sa}}^{DOST} = & \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\
& \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_s+j_{sa}^{ik}-j_{sa}-1} \sum_{j_{sa}=j_{sa}+2}^{l_s+j_{sa}-l} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - k_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - k_2 - 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - k_1 + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - k_1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{ik, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-1)}$$

$$\sum_{n+l}^{(n_i-n_{ik}-k_1+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-n_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \right)$$

GÜLDÜNKYA

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_{sa} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \left(\frac{(D - j_{sa} - l_{sa} - s)!}{(n + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l-1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \\
 & \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} = \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 - 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \frac{(n_i - j_{ik} - k_1 - 1)!}{(j_{ik} - j_{sa}^{ik} - l + 1)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \right) \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \left(\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{l_{sa} - l + 1} \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_2} \right)$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j^{sa} - l_{sa} - j^{sa} - n - 1)!}{(D + j^{sa} - n - 1)! \cdot (D + j^{sa} - n - 1 - j^{sa} - l_{sa} - s)!} \cdot \sum_{k=j_{sa}^{ik}+1}^{n-j_{sa}^{ik}-1} \sum_{l_{ik}=j_{sa}^{ik}+1}^{n-j_{sa}^{ik}-1} \sum_{n_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n-j_{sa}^{ik}-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_i-s-\mathbb{k}_1-\mathbb{k}_2)}^{(n_i-s-\mathbb{k}_1-\mathbb{k}_2)!} \cdot \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$n > n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{SDOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} - j_{sa} + j_{ik} - j_{sa}^{ik} - l + 1)} \sum_{(n_i = n + \mathbb{k}_1)}^n \sum_{(n_{is} = n + \mathbb{k}_1 + j_{sa}^{ik} - j_{ik})}^{(n_i - j_{ik} + 1)} \sum_{(n_{sa} = n - j_{sa} + 1)}^{(n_{ik} + j_{ik} - \mathbb{k}_2)} \frac{(n_{ik} - j_{sa} - \mathbb{k}_1 + 1)!}{(j_{ik} - 2)! \cdot (n_{is} - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - j_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa}^{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$

$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - j_{sa}^{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

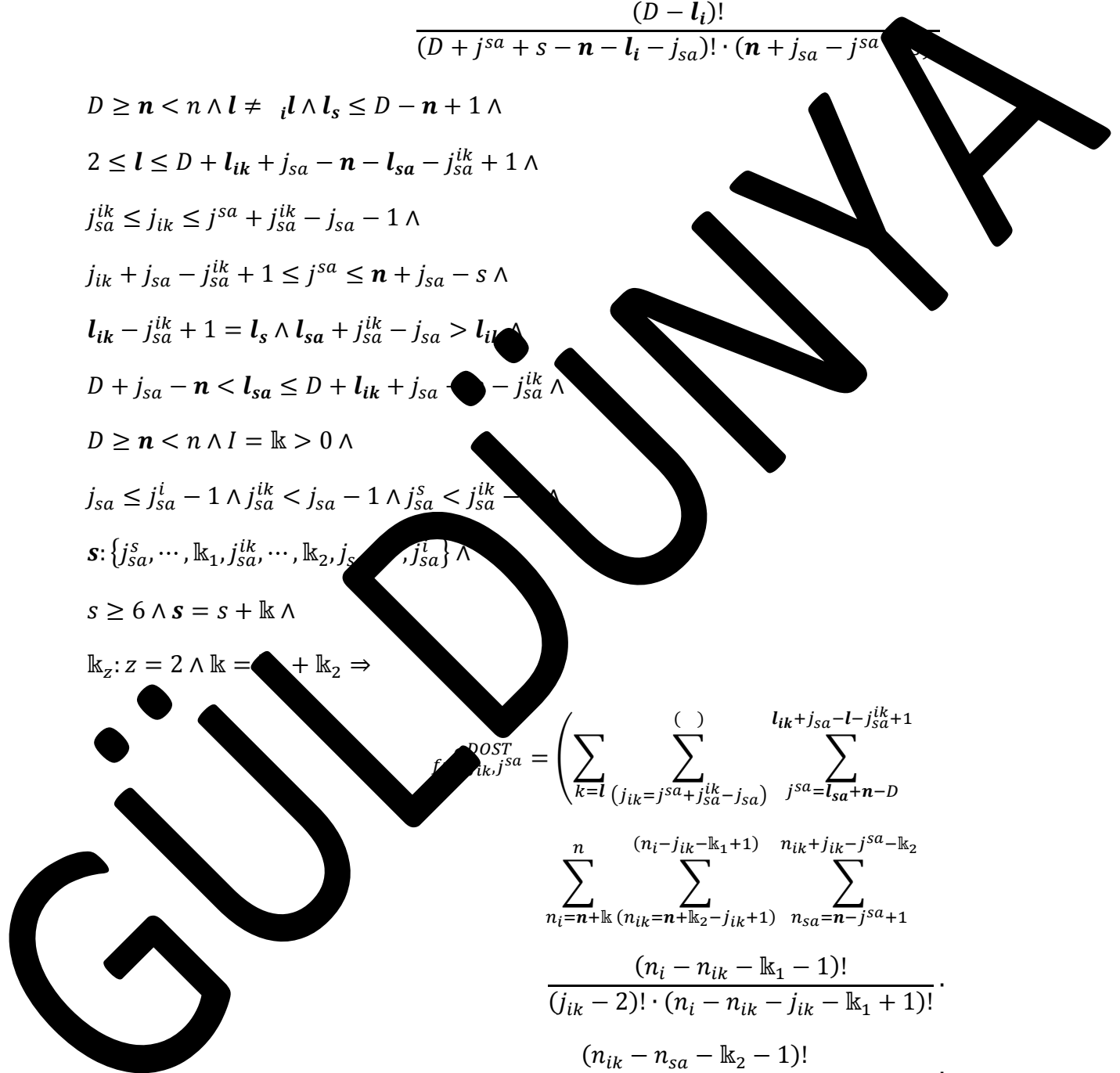
$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^l, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \dots + \mathbb{k}_2 \Rightarrow$

$$f_{ik, j^{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{(n_i=n+\mathbb{k})}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \right)$$



$$\begin{aligned}
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik}} \sum_{j_{sa} = j_{sa} + n - D}^{j_{sa} - l - j_{sa}^{ik}} \right. \\
& \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_1 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \\
& \sum_{n_i = n + \mathbb{k}_1}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}
\end{aligned}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{(l_{ik}=l+n+j_{sa}-D-...)}^{()} \sum_{(j_s+1)}^{()} \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge D + l_{sa} + j_{sa} - j_{sa}^{ik} + 2 \leq l \leq i - 1 \wedge j_{sa}^{ik} \leq j_{ik} - j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge D \geq n < n \wedge I = k > 0 \wedge j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n}^{l_{sa}-l+1} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik})}^{(n_i-j_{ik}-k_1+1)} \sum_{(n_{sa}=n+k_1-j_{sa})}^{(n_{ik}-j_{sa}-k_2)} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - j_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - k_2)!} \cdot \frac{(n_{sa} - j_{sa} - n - 1)!}{(n_{sa} - j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(n - l - j_{sa}^{ik})!}{(n - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot j_{sa}^{ik}! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(n_i-j_s+1)} \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa} = l_{sa} + n - D \right)$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\begin{aligned}
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left(\sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D} \right. \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - \mathbb{k}_1 + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{ik} + j_{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
 \end{aligned}$$

GÜLDÜŞMAYA

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{()}{l_s - l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}), (l_i+n+l_{sa}-D-s)}^{(n_i-j_s)} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{k_1}), (n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s = D - n - 2 \wedge D + l_{sa} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 2 \leq l \leq l - 1 \wedge j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge j_{ik} + j_{sa} - j_{sa}^{ik} + 1 = j^{sa} \leq n + j_{sa} - s \wedge l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge j^{sa} < n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge D \geq n < n \wedge l = l > 0 \wedge j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{sa} + n - D}^{l_{sa} - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{l_{sa} - l + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - \mathbb{k}_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

GÜLDÜZMAYI

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n; n+l_k}^n \sum_{(n_{is}=n+l_k-j_{ik})}^{(n_{is}+1)} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-l_{ik}-k_1)}^{()} \sum_{(n_{ik}-j_{sa}-k_2)} \frac{(n_{ik}-s-k_1-k_2)!}{(n_{ik}-k_2)! \cdot (n-s)!} \cdot \frac{(j_{sa}-l-1)!}{(j_{sa}+j_{sa}^{ik}-j_{ik}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_{ik}-l)!}{(D+j_{sa}+n-l_i-j_{sa})! \cdot (n+j_{sa}-j_{sa}^{ik}-s)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n - 1 \wedge$$

$$2 \leq l \leq D - l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + j_{sa}^{ik} = l_s \wedge l_s \cdot j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_{ik}, j^{sa}}^{DOST} = & \left(\sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{(n_{sa}=n-k_2-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - k_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_1 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - k_2 - 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (j^{sa})!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa} - j_{sa}^{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{ik}-1)}$$

$$\sum_{n+l}^{(n_i-n_{ik}-k_1+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-n_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s+j_{sa}^{ik}-l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa}^i)! \cdot (n - j_{sa}^i - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge$

$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq l + s - n \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$

$s \geq l \wedge s = s + \mathbb{k}$

$\mathbb{k}_z : z = 1, \dots, \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s + j_{sa}^{ik})} \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{(n_{is} + \mathbb{k} (n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik}))} \sum_{(n_{is} + j_{sa}^s - j_{sa}^{ik} = s_1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - l - s)} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik} + j_{sa} - l - s + 1} \sum_{n_i = n + k}^{n_{ik} = n + k_2 - j_{ik} + 1} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{sa} = n - j_{sa} - k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{n} \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\begin{aligned}
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{(\cdot)} \sum_{(j_{ik}=j_{sa}^{ik}-j_{sa})}^{(\cdot)} \sum_{l_{ik}+j_{sa}^{ik}+1}^{(\cdot)} \sum_{n_i=n+l_k}^{(\cdot)} \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(\cdot)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\cdot)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \\
& \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$(D \geq n - n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{ik} j_{sa}}^{DOS1} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{(l_i+n+j_{sa}-D-s-1)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)} \sum_{(j_{sa}^{ik}-l-s+1)} \sum_{(j_{ik}-k_1+1)} \sum_{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{(n_{sa}=n-j_{sa}+1)} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{l_i+j_{sa}-l-s+1} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(n_i-j_s+1)} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} - j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}^{(n_i - j_{sa} - \mathbb{k}_1 + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_i - n_{ik} - \mathbb{k}_1 - 1)!} \cdot \frac{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
& \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_i + j_{sa} - l - s + 1} j^{sa} = l_s + j_{sa} - l + 1 \\
& \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
& \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
& \frac{(n_i - n - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - j_{ik} - 1)!}{(l_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
& \sum_{k=l}^{()} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{l_s + j_{sa} - l} j^{sa} = l_i + n + j_{sa} - D - s \\
& \sum_{n_{ik} = n_i + j_{sa}^s - j_{sa}^{ik} - k_1}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
& \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz S_{j_{sa}^{ik}}^{DOST} = \sum_{k=l}^{n+j_{sa}^{ik}-D-s+1} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_i+j_{sa}^{ik}-s+1} \sum_{j=l_i+n+j_{sa}-D-s}^{n_{sa}=n-j_{sa}^{ik}+1} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_s+j_{sa}^{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{\mathbb{k}, j_{sa}}^{DOST} = \sum_{k=l}^{\binom{D+j_{sa}-l-j_{sa}^{ik}+1}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}^{ik}=j_{sa}+1}^{n_{ik}+j_{sa}-j_{sa}^{ik}+1} \sum_{j_{sa}^{ik}=j_{sa}+1}^{n_{sa}=n-j_{sa}+1} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{\binom{D+j_{sa}-l-j_{sa}^{ik}+1}{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{j_{sa}^{ik}=j_{sa}+1}^{n_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i - j_{sa} - s > 0 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} - s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{DOST} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}, n_{sa}=l_i+n+j_{sa}-D-k+1)}$$

$$\sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{(n_{is}=n+j_{sa}^s-j_{sa}^{ik}-s-1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(n_i-j_{sa}^{ik}-k_1+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_i=n+k}^{(n_{ik}=n+k_2-j_{ik}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{sa}-1)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l - l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i - j_{sa} - s > 0 \wedge$$

$$D + s - n < l_i \leq D + l_s - s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j_{sa}^{DOST}}} = \sum_{k=l}^{(l_{sa}+j_{sa}^{ik}-l-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-l_{sa})} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j_{sa}^{ik}=j_{sa}-j_{sa}^{ik})} \sum_{(n_{is}=n+\mathbb{k}_1+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_i-s-\mathbb{k}_1-\mathbb{k}_2)!} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{l=1}^{(j_{sa}^{ik} - j_{sa})} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{(j_{sa}^{ik} - j_{sa})} \sum_{j_{sa} = j_{sa} + 1}^{(j_{sa}^{ik} - j_{sa})} \sum_{n_i = n + k}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{(n_{ik} - k_1 - 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{sa} - k_2 - 1)} \frac{(n_i - 1)! (n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{sa} - k_2 - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{l_{ik} + j_{sa}^{ik} - j_{sa}^{ik} + 1} \sum_{j_{sa}^{ik} = j_{sa}^{ik} + 1}^{j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} + j_{sa}^{ik} - j_{ik}}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D > n) \wedge n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}^{ik}=j_{sa}+1}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{j_{ik}-k_1+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik})} \frac{(n_i - s - \mathbb{k}_1)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n_i - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{sa}^{ik} - l)! \cdot (j_{sa}^{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l - 1)!}{(D + j^{sa} + s - n - j_{sa}^{ik} - j_{sa}^{ik})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n - l_i \leq D + l_s + s - n - 1$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D + j_{sa} - n - l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$

$(l_i \wedge l_s \leq D - n + 1 \wedge l_s > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z^{S_{j_{ik}, j^{sa}}^{DOST}} = \sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik})! \cdot (l_{ik} - j_{sa})!}{(l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(l_{ik}-l+1)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} j^{sa}=l_i+n+j_{sa}-D-s$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{ik})}^{(n_i+l_k+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-k_1}^{(\quad)} \sum_{(n_{ik}=n_{is}+j_{sa}^{ik}-k_2)}^{(\quad)} \frac{(n_{ik} - s - k_1 - k_2)!}{(n - s - k_2)! \cdot (n - s)!}$$

$$\frac{(j_{ik} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_{sa} \leq D + l_s + s - n - 1) \vee$$

$$(D \geq n < n \wedge l_i \neq l_s \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}^{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}$$

$$\frac{(n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!}$$

$$\frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{sa}-j_{sa}^{ik}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

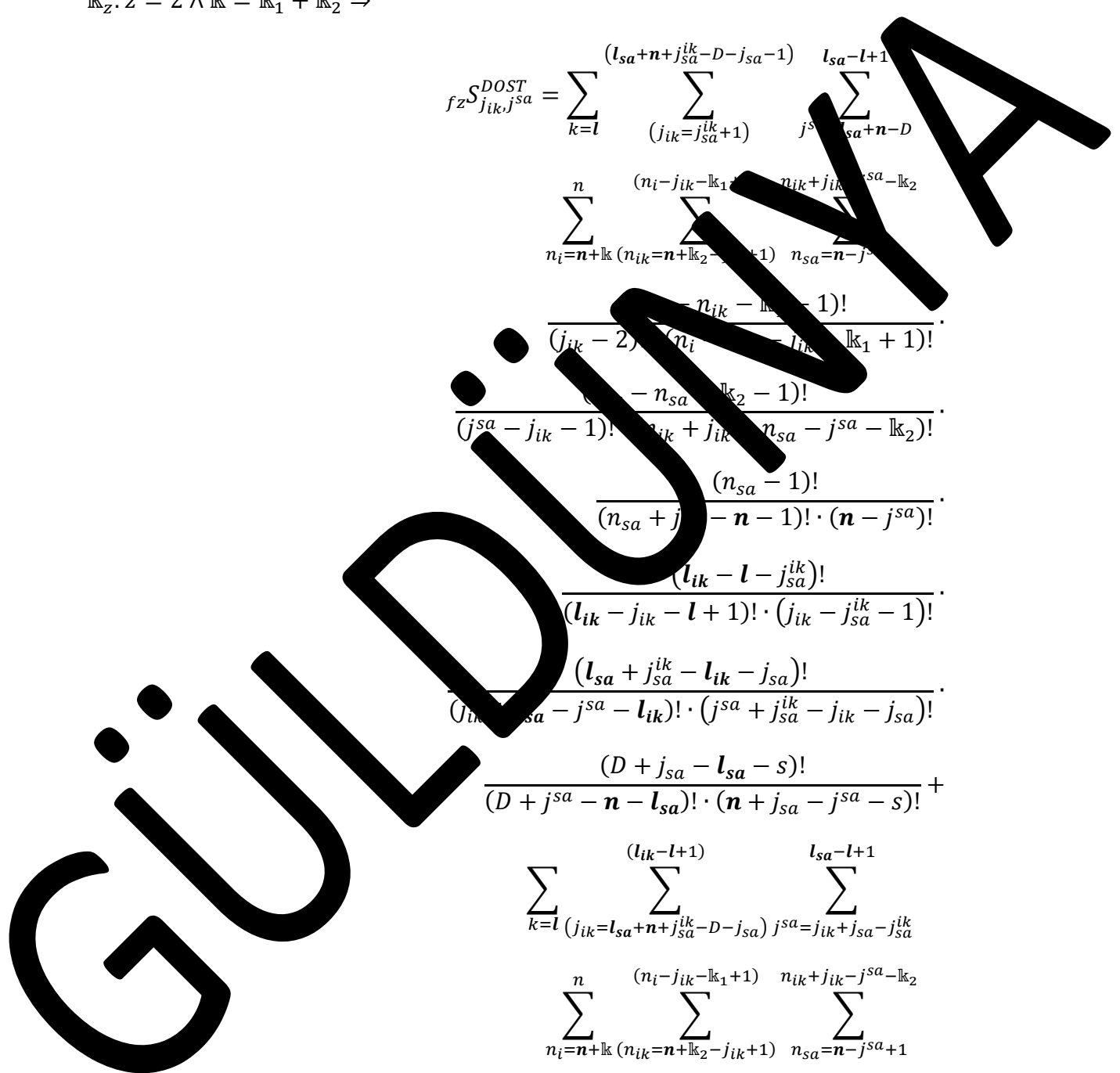
$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{l_{sa}-l+1} \sum_{j_{sa}^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!}$$



$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa})} \sum_{(j_{sa}=j_{sa}-j_{sa})} \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_i - s - l_{k_1} - l_{k_2})!} \frac{(l_s - l - 1)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \frac{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(D - l_i)!} \cdot \frac{1}{(n + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq l_i < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z} S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k_1=0}^{(j_{sa}+k-j_{sa})} \sum_{j_{sa}^{ik}=j_{sa}+1}^{(n_{ik}-k_1-j_{sa}+1)} \sum_{j_{sa}^s=j_{sa}+1}^{(n_{sa}-k_2-j_{sa}+1)} \dots$$

$$\frac{(n_{ik}-k_1-j_{sa}+1)! \cdot (n_{sa}-k_2-j_{sa}+1)!}{(j_{sa}^i-j_{sa}+1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-k_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}^s=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \dots$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=0}^{n - j_{sa} - j^{sa} - 1} \sum_{l_{ik}=j_{sa}^{ik} + j_{sa} - k}^{n - j_{sa} - j^{sa} - 1} \sum_{j_{sa}^{ik}=j_{sa} + 1}^{n - j_{sa} - j^{sa} - 1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik})} \sum_{(j_{sa}^{sa+1})} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \sum_{(n_{sa}=n-j_{sa}^{sa-\mathbb{k}_2})} \frac{(n_i - j_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \Big) +$$

$$\left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j_{sa}^{sa+2})} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \sum_{(n_{sa}=n-j_{sa}^{sa+1})} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\begin{aligned}
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}+1} \sum_{(j_{sa}+j_{sa}^{ik}-j_{sa}^{ik}+2)}^{l_{sa}+1} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_{ik}-l_{ik}+1)}^{(n_i-j_{ik}-l_{ik}+1)} \sum_{(n_{ik}+j_{ik}-l_{ik_2})}^{(n_{ik}+j_{ik}-l_{ik_2})} \\
 & \frac{(n_{ik}-j_{ik}-l_{ik_1}+1)!}{(j_{ik}-l_{ik_1}+1)! \cdot (n_{ik}-n_{ik}-j_{ik}-l_{ik_1}+1)!} \cdot \\
 & \frac{(n_{ik}-j_{sa}-l_{ik_2}-1)!}{(j^{sa}-l_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{ik_2})!} \cdot \\
 & \frac{(n_{sa}-1)!}{(j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{()} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{ik_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{ik_2})}^{()}
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$f_z S_{j_{sa}^{ik}}^{D_0} = \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\begin{aligned}
 & \left(\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D + j_{sa}^{ik} - n_{sa} - s)!}{(D + j_{sa}^{ik} - n_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{(\quad)} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDEN

$$\left((D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$\left((D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, i\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} z^DOST_{j_{ik}, j_{sa}} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\ &\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n: n+l_k}^n \sum_{(n_{is} = n_{is} + 1)} (n_{is} + 1) j_{ik}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1}^{()} \sum_{(n_{ik} = j_{sa} - k_2)} \frac{(n_{is} - s - k_1 - k_2)!}{(n_{is} - k_1 - k_2)! \cdot (n - s)!}$$

$$\frac{(j_{sa} - l - 1)!}{(j_{sa} + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(j_{sa} - l_i)!}{(D + j^{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l = 1 \wedge l_s \leq D - n - 1 \wedge$$

$$2 \leq l \leq D + j_{sa}^{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_s \leq j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_{ik}, j^{sa}}^{DOST} = & \left(\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \left. \frac{(D + l_{sa} - l_{ik} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left(\sum_{k=l} \sum_{(j_{ik}=j_{sa}^{lk}+1)}^{(j^{sa}+j_{sa}-j_{sa}^{lk}-1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_{ik} - l - j_{sa}^{lk})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{lk} - 1)!} \cdot \\
& \left. \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \right)
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} + j_{sa} - n - 1)!}{(j^{sa} - 1)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik})! \cdot (l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

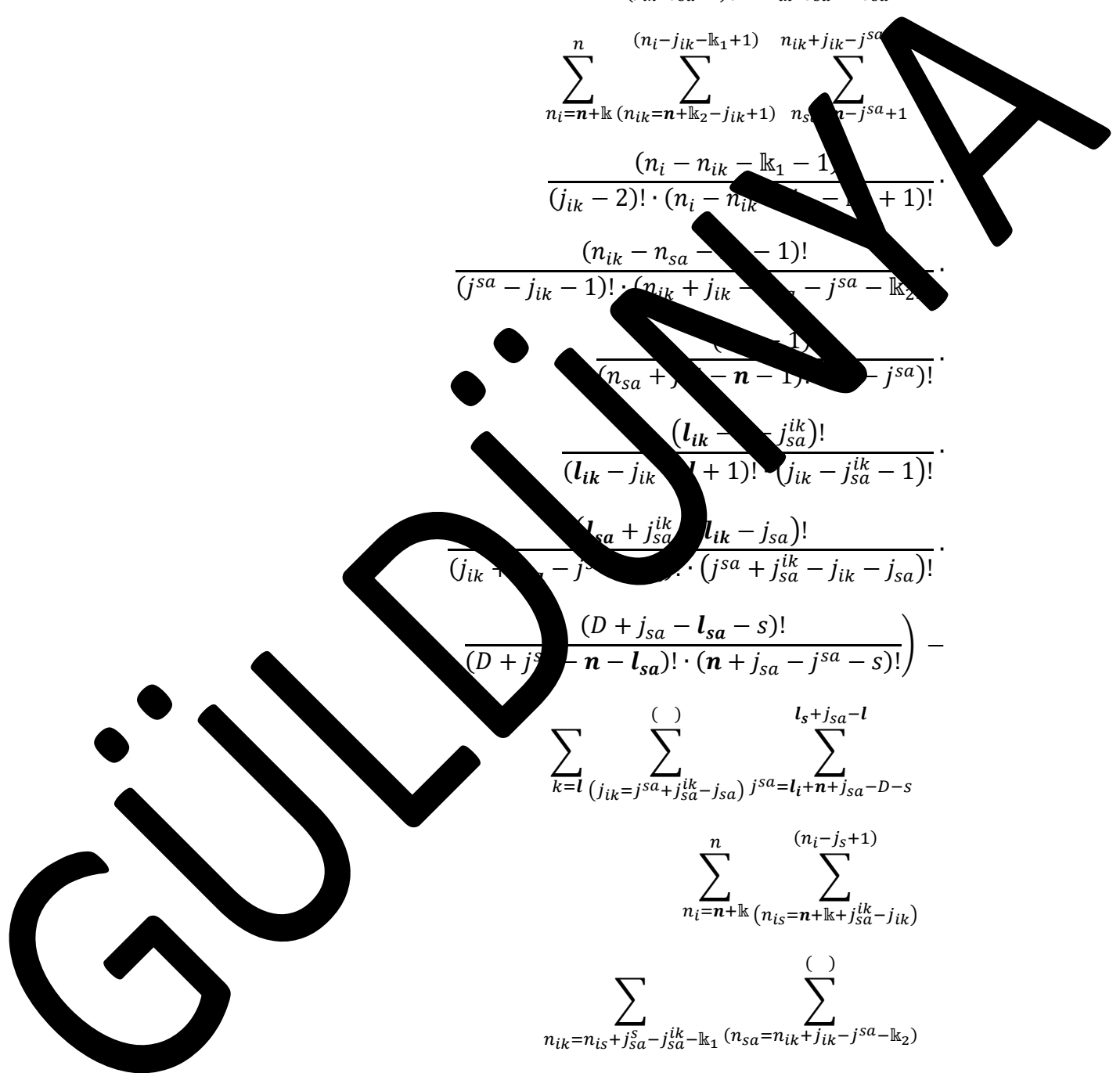
$$\sum_{k=l}^{()} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_s+j_{sa}-l} j^{sa}=l_i+n+j_{sa}-D-s$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()}$$

$$\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_{ik} + j_{sa} - n - l_{sa} - j_{sa}^{ik} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

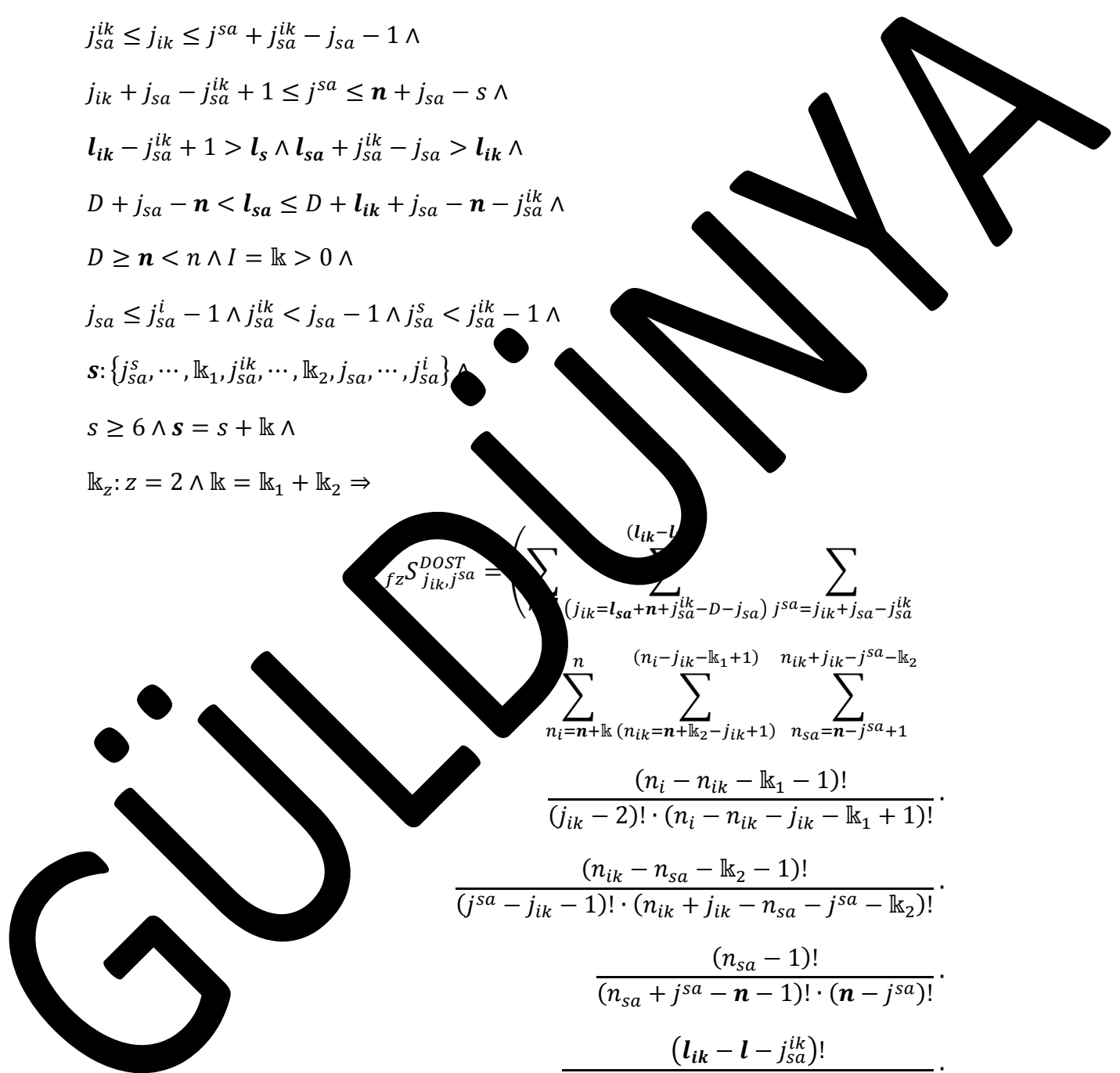
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{(l_{ik}-l)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$



$$\begin{aligned}
 & \left(\sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa})}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

GUIDE

A

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \left(\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} j_{sa} = i + j_{sa} - j_{sa}^{ik}$$

$$\sum_{n=n+l}^n \sum_{(n_{is} = n - k)}^{(n_i - k + 1)} j_{ik}$$

$$\sum_{n_{ij} = n_{is} + j_{sa}^{ik} - k_1}^{(n_i - k_1 + 1)} \sum_{(n_{js} = n_{is} + j_{sa}^{ik} - k_2)}^{(n_j - k_2 + 1)} j_{sa} - k_2$$

$$\frac{(n_{is} - k_1 - k_2)!}{(n - k_1 - k_2)! \cdot (n - s)!} \cdot \frac{(n_{is} - l - 1)!}{(j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $D \geq n < n \wedge l \neq 1 \wedge l_s \leq D - n - 1 \wedge$
- $j_{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{ik} \leq n + j_{sa} - 1 \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$
- $D + j_{sa}^{ik} - n - l_{ik} \leq D - l_s + j_{sa}^{ik} - n - 1 \wedge$
- $D > n \wedge I = k > 0 \wedge$
- $j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
- $s \in \{j_{sa}^{ik}, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$
- $s \geq 6 \wedge s = s + k \wedge$
- $k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_{ik} j_{sa}}^{DOST} &= \sum_{k=l}^{(l_{ik}-l+1)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa}^{ik} - l_{k_2})!} \cdot \\
 &\frac{(n_i - j_{ik} - l_{k_1} - 1)!}{(n_i + j_{sa} - n - 1)! \cdot (n - j_{sa}^{ik})!} \cdot \\
 &\frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(n_i - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - n_{sa} - l_{sa} - s)!}{(n_i + j_{sa} - n - l_{sa}^{ik})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!} \cdot \\
 &\sum_{k=l}^{(l_{sa}^{ik}-l)} \sum_{(j_{ik}=l_{ik}+n-D)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-l_{k_1}}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2})} \\
 &\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j_{sa}^{ik} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{(l_i+j_{sa}-l-s+1)}^{(\quad)} \sum_{(j_{sa}-D-s)}^{(\quad)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=k_2-j_{ik}+1)}^{(n_i-j_{ik}-1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-k_2)}$$

$$\frac{(n_i - j_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(l_s+j_{sa}-l)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = j_{ik} \wedge l_i + j_{sa} - s = l_{sa}$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + 1$

$\mathbb{k}_1 + z = 2 \wedge \mathbb{k}_1 = \mathbb{k}_1 + 1 \Rightarrow$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i + j_{sa}^{ik} - l - s + 1)} \sum_{(j_{ik}=l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{ik} + n - D)} \sum_{j_{sa} = j_{sa} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n, n+k}^n \sum_{(n_{is} = \dots)}^{(n_i + 1)} \dots (j_{ik})$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - k_1} \dots \sum_{(n_{ik} - j_{sa} - k_2)} \dots \frac{(n - s - k_1 - k_2)!}{(n - k_1 - k_2)! \cdot (n - s)!}$$

$$\dots \frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_i - l_i)!}{(D + j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

- $D \geq n < n \wedge l = l \wedge l_s \leq D - n - 1 \wedge$
- $j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$
- $j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - j_{sa}^{ik} \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$
- $D + j_{sa} - n - l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$
- $D > n \wedge l = k > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$
- $\{j_{sa}^i, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$
- $s \geq 6 \wedge s = s + k \wedge$
- $k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$\begin{aligned}
f_z S_{j_{ik}, j_{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D + j_{sa}^{ik} - l_{sa} - s)!}{(D + j_{sa}^{ik} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_i+j_{sa}-l-s+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
&\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j_{sa}=l_{sa}+n-l}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{is} \triangleq n+l-j_{ik})}^{(n_i+l+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-l_{sa}-l}^{(\quad)} \sum_{(n_{ik} \triangleq n_{is}+j_{sa}^{ik}-l_{sa}-l)}^{(\quad)} \frac{(n-s-l_{k_1}-l_{k_2})!}{(n-l_{k_1}-l_{k_2})! \cdot (n-s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa} - j_{sa} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot (l_i)! \cdot (D + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - l - 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - j_{sa}^{ik}$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - l_{sa} < l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D > n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\{l_{sa}, l_{sa}^{ik}, l_{sa}^s, l_{k_1}, j_{sa}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_{ik} j_{sa}}^{DOST} = & \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_i+n+j_{sa}^{ik}-D-s-1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} + j_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!} + \\
 & \sum_{k=l} \sum_{(j_{ik}=l_i+n+j_{sa}^{ik}-D-s)}^{(l_{ik}-l+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

GÜLDEN

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} \sum_{n, n+k}^{(n_i = n+1)} \sum_{(n_{is} = n)} (j_{ik}) \sum_{(n_{ik} = n_{is} + j_{sa}^{ik} - k_1 - k_2)} \frac{(n_{ik} - j_{sa} - k_2)!}{(n_{ik} - n - k_1 - k_2)! \cdot (n - s)!} \frac{(n_{ik} - l - 1)!}{(j_{ik} + j_{sa} - j_{sa}^{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot (l_i)! \cdot (n + j_{sa} - j^{sa} - s)!$$

$$\begin{aligned} & ((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \\ & j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & l_i \leq D + s - n) \vee \\ & ((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \\ & j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge \\ & l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n)) \wedge \\ & D \geq n < n \wedge l = k > 0 \wedge \end{aligned}$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_{sa}-l+1} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}$$

$$\frac{(n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-j_{ik}-\mathbb{k}_1+1)!}$$

$$\frac{(n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!}$$

$$\frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$

$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

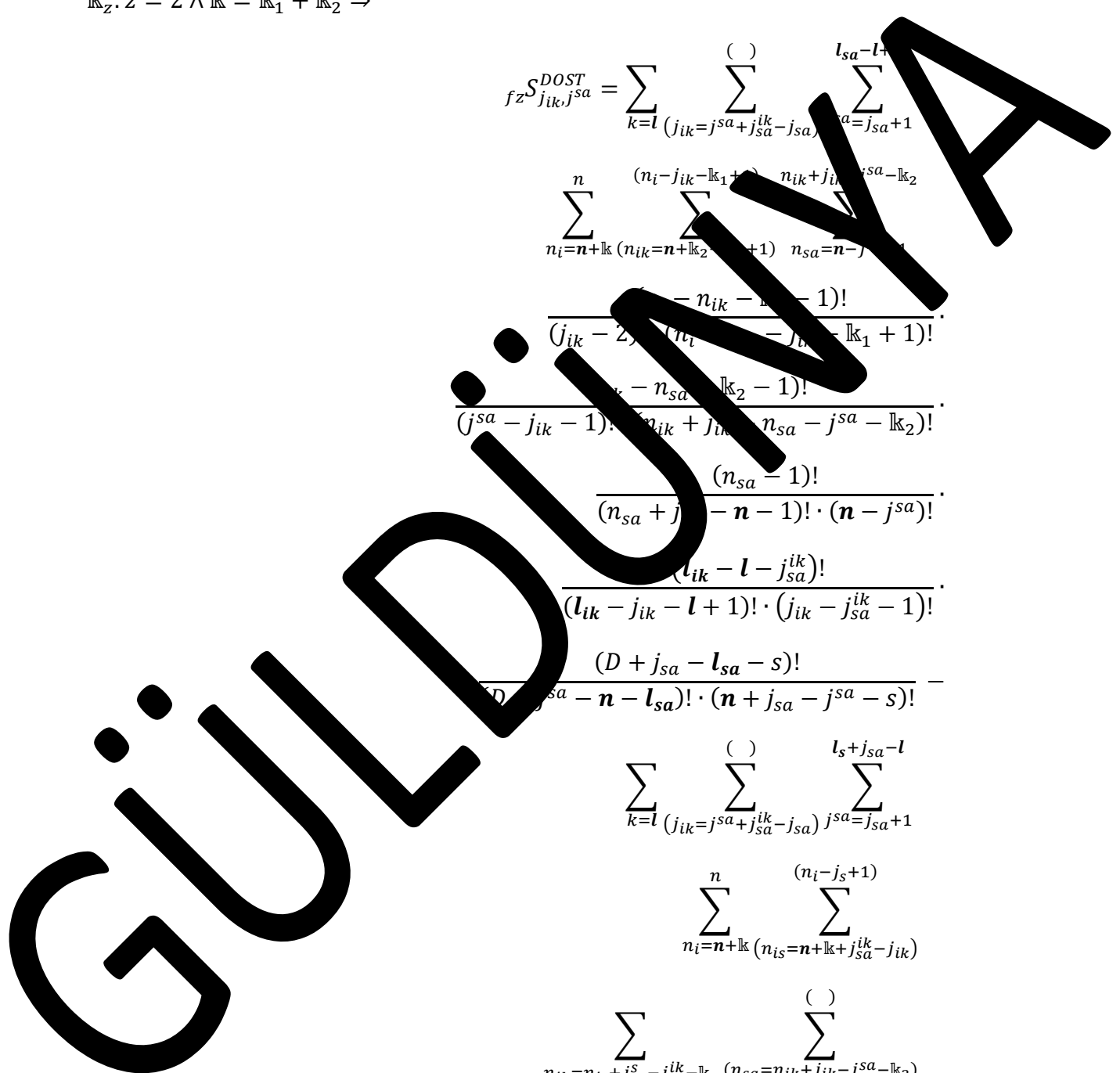
$$\sum_{k=l}^{(\quad)} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_{sa}+j_{sa}-l} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i-s-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)! \cdot (n-s)!}$$

$$\frac{(l_s-l-1)!}{(l_s+j_{sa}^{ik}-j_{ik}-l)! \cdot (j_{ik}-j_{sa}^{ik}-1)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} f_{z,j_{sa}}^{ST} &= \sum_{k=l}^{n} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(n_i-j_{ik}-k_1+1)} \sum_{j_{sa}=j^{sa}+1}^{l_{sa}-l+1} \\ &\sum_{i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\ &\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\ &\sum_{k=l} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(n_i-j_{ik}-k_1+1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa})}^{()}$$

$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{sa} \wedge$

$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_i + j_{sa}^{ik} - n - 1) \wedge$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$(D + j_{sa}^{ik} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$

$D \geq n < n \wedge l = 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\{s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
 f_Z S_{j_{ik}, j^{sa}}^{DOST} = & \sum_{k=l}^{(l_{sa} + j_{sa}^{ik} - l - j_{sa} + 1)} \sum_{(j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_{sa} = n - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - k_2} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(j_{ik} - 1)!}{(n_i - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - n_{sa} - l_{sa} - s)!}{(D - j^{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s + j_s^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} - k_1}^{(\quad)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - k_2)}^{(\quad)} \\
 & \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^k - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$fz_{(k,j^{sa})}^{DST} = \sum_{k=l}^{(j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_s + j_{sa} - l} \sum_{j^{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l + j_{sa} - l + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{(n_s = n + k - j_{sa} - k_2)}^{n_{ik} + j_{sa} - j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - j_{sa} - k_1 - 1)! \cdot (n_i - n_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - j_{sa} - k_2 - 1)! \cdot (n_{ik} - n_{sa} - k_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=l}^{()} \sum_{(j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa})}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = l_i + n + j_{sa} - D - s}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1}^{()} \sum_{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2)}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!}$$

GÜLDÜŞMAYA

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = l \wedge l_s > 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: (j_{sa}^s, \dots, l_{k_1}, j_{sa}^s, \dots, l_{k_2}, j_{sa}^s, \dots, j_{sa}^i)$$

$$s \geq l_{k_1} \wedge s = s + l_{k_1} \wedge$$

$$l_{k_2}: z = z + l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa} + n + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D}^{n_{ik} + j_{ik} - j^{sa} - l_{k_2}} \sum_{n_i = n + l_{k_1}}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_i - n_{ik} - l_{k_1} - 1)!} \cdot \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa})!} +$$

$$\sum_{k=l}^{(1+j_{sa}^{ik}-l)} \sum_{j_{sa}=l_{sa}+n+1}^{(l_{sa}-l+1)} \sum_{j_{ik}=n-j_{sa}^{ik}}^{(D-j_{sa})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1-1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_i+n+j_{sa}^{ik}-D-s}^{(l_{ik}-l+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

GÜLDÜSÜZ

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}-k_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-k_2)}^{()}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (l - 1)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j_{sa} - s)!}$$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{sa} \leq l_s \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{sa} - j_{sa}^{sa} + 1 > l_s \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D + s - n < l_i \leq (l_{sa} + s - n - j_{sa}) \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1)} \sum_{l_{ik}=l_{ik}+n-D}^{(j_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1)} \sum_{n_{sa}=n-j_{sa}+1}^{(j_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_{ik}+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}+\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \frac{(n_i - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l} \sum_{(j_{ik}=l_{ik}+n-D)}^{(l_{ik}-l+1)} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa} - 1)!} \cdot \\
 & \frac{(n + j_{sa} - n - s)!}{(n + j^{sa} - n - s)! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^n \sum_{(j_{sa}^{ik}-j_{sa})}^{(j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-l_{k_1}}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \\
 & \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = l \wedge l_s > D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa}^l - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^l, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_2} = l_{k_1} + 2 \wedge l_{k_1} = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z^S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=l_{ik}+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{l=1}^{(l_{ik}-l)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-j_{sa}}^{l_{sa}-l+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_{ik} - l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

GÜLDENSKYD

$$\sum_{k=l}^{(l_s + j_{sa}^{ik} - l)} \sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}^{(l_s + j_{sa}^{ik} - l)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(l_s + j_{sa}^{ik} - l)}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k + j_{sa}^{ik} - (n_i - j_s + 1))}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik} - k_1}^{(n_i - j_s + 1 - k_1)} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - k_2)}^{(n_i - j_s + 1 - k_2)}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n_i - s)!}$$

$$\frac{(l_s - l)!}{(l_s + j_{sa}^{ik} - j_{ik} - 1)! \cdot (j_{ik} + j_{sa} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D - n - 1)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n_i + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1) \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D - n < l_i \leq D + l_{sa} + s - n - j_{sa}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

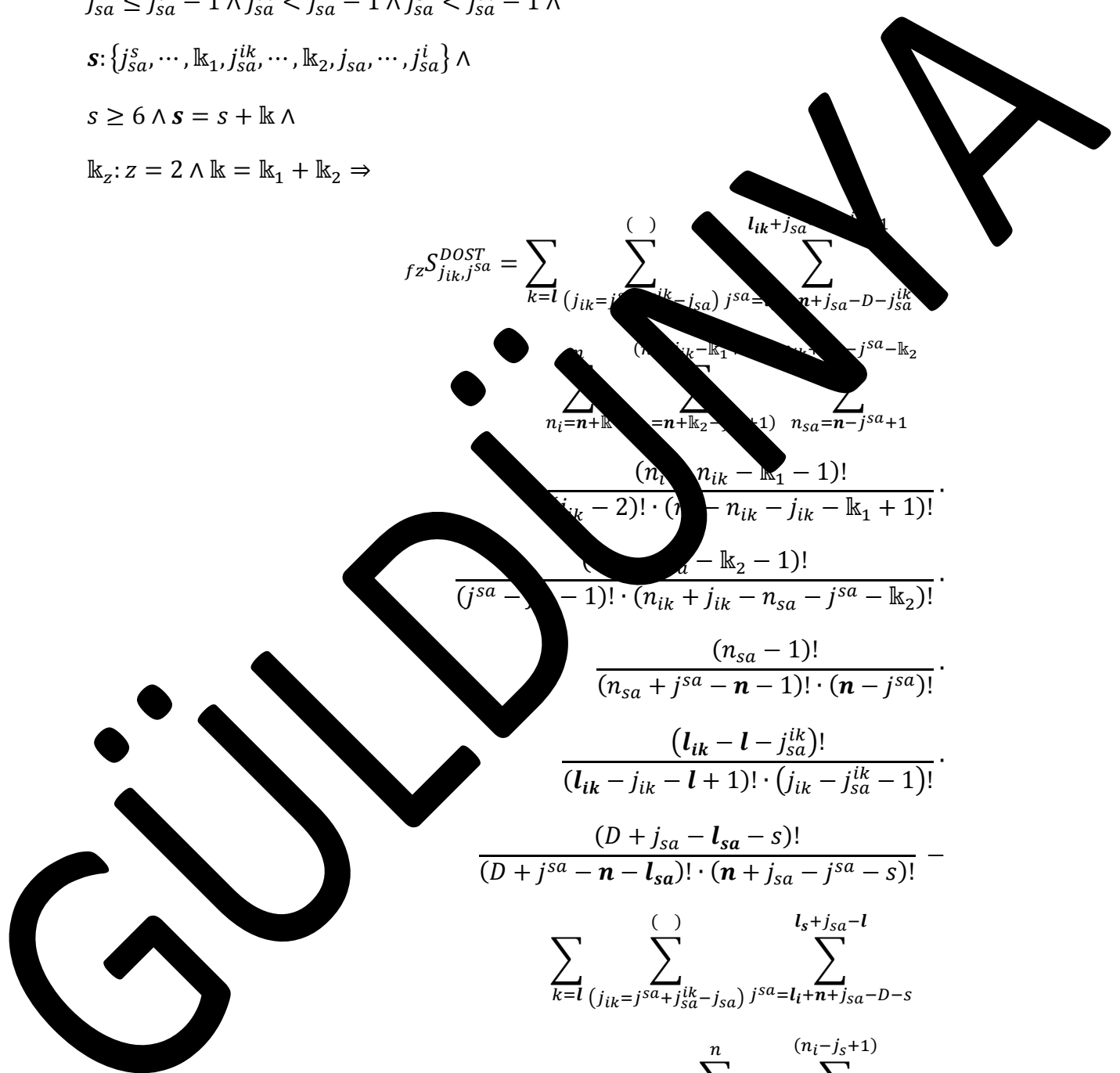
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{j_{sa}=l_i+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}} \sum_{n_i=n+k}^{(n_{ik}-k_1)} \sum_{n_{sa}=n-j_{sa}^{ik}}^{(n_{sa}-k_2)} \frac{(n_{ik}-k_1-1)!}{(n_{ik}-2)! \cdot (n_{sa}-n_{ik}-j_{ik}-k_1+1)!} \cdot \frac{(n_{sa}-k_2-1)!}{(j_{sa}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-k_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \sum_{k=l}^{(\quad)} \sum_{j_{ik}=j_{sa}^s+j_{sa}^{ik}-j_{sa}}^{(\quad)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \sum_{n_i=n+k}^n \sum_{n_{sa}=n+k+j_{sa}^{ik}-j_{ik}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}-k_1}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2}^{(\quad)}$$



$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_{sa}^{ik} - j_{ik} - l)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{ik})!}$$

$$D \geq n < n \wedge l = i l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \left(\sum_{k=1}^n \sum_{l(j_{ik}=j_{sa}^{ik})}^{()} \sum_{j_{sa}^{sa}=j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \right) + \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\left(\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{()} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-i^{l+1}} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - l_{k_2})!} \cdot \frac{(n_i - 1)!}{(n_i - j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - 1)!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{()} \sum_{j^{sa}=j_{sa}} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^n \sum_{l=j_{sa}^{ik}}^{l_{sa}-i} \sum_{j_{sa}=j_{sa}}^{j_{sa}^{ik}-i} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{sa}^{ik}+1}^{n_i-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{n_{sa}-n-j_{sa}^{ik}+1} \frac{(n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-j_{ik}-\mathbb{k}_1+1)!} \cdot \frac{(n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{ik}-i-l-j_{sa}^{ik})!}{(l_{ik}-j_{ik}-i-l+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \cdot \sum_{k=i}^n \sum_{l=j_{sa}^{ik}}^{l_{sa}-i} \sum_{j_{sa}=j_{sa}}^{j_{sa}^{ik}-i} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{n_i-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{n_{sa}-n-j_{sa}^{ik}+1} \frac{(n_i-s-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)! \cdot (n-s)!} \cdot \frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-s)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

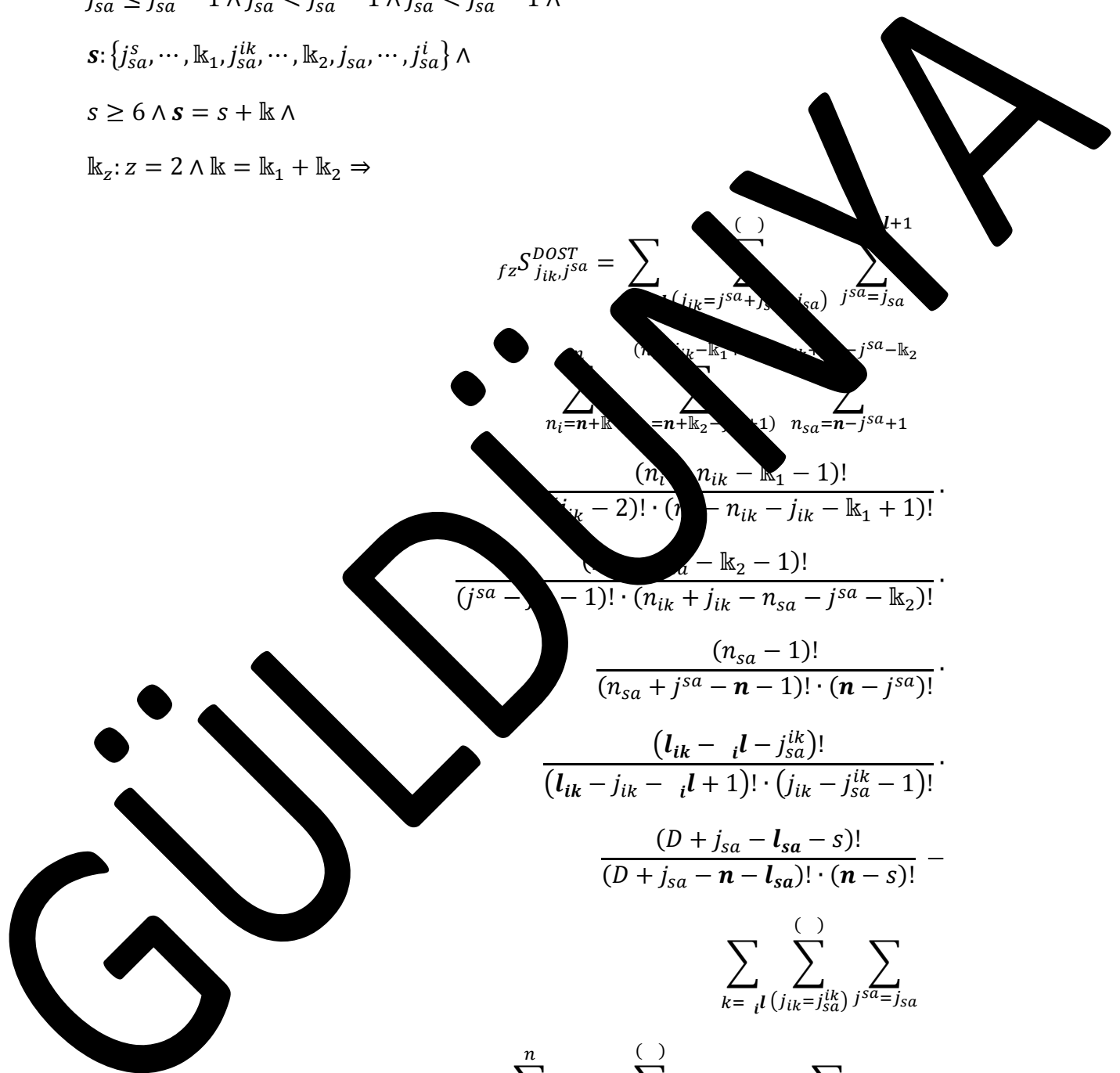
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{n_i=n+k}^{\binom{()}{n_i}} \sum_{n_{ik}=n_i-j_{ik}-k_1+1}^{\binom{()}{n_{ik}}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}^{\binom{()}{n_{sa}}} \sum_{j_{sa}=j_{sa}}^{\binom{()}{j_{sa}}} \frac{(n_i - n_{ik} - k_1 - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{sa} - k_2 - 1)!}{(j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \sum_{k=i^l}^{\binom{()}{k}} \sum_{j_{ik}=j_{sa}^{ik}}^{\binom{()}{j_{ik}}} \sum_{j_{sa}=j_{sa}}^{\binom{()}{j_{sa}}} \sum_{n_i=n+k}^n \sum_{n_{ik}=n_i-j_{ik}-k_1+1}^{\binom{()}{n_{ik}}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2}^{\binom{()}{n_{sa}}} \frac{(n_i - s - k_1 - k_2)!}{(n_i - n - k_1 - k_2)! \cdot (n - s)!}$$



$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j}^{D_0} = \sum_{i^l} \sum_{j_{sa}^{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{j_{sa}^{ik} = j_{sa}} \frac{(l_{ik} + j_{sa} - i^l - j_{sa}^{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_i - n_{ik} - k_1 + 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(l_{ik} - i^l - j_{sa}^{ik})!} \cdot \frac{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(D + j_{sa} - l_{sa} - s)!} \cdot \frac{1}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=1}^{\infty} \sum_{i^l} \sum_{j_{sa}^{ik} = j_{sa}} (j_{ik} = j_{sa}^{ik})$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$fz^{OST} = \sum_{k=i^l}^{n_{sa}+j_{sa}^{ik}-i^l-j_{sa}+1} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{\binom{()}{n_{sa}=n_{ik}}}$$

$$\frac{(n_i - s - l_{k_1} - \dots)!}{(n_i - n - l_{k_1})! \cdot \dots!} \cdot \frac{(D - l_i)!}{(D + s - \dots - l_i)! \cdot (n - \dots)!}$$

$$D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1, j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \cdot 6 \wedge s = \dots \wedge k \wedge$$

$$l_{k_2} = 2 \wedge k = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_z S_{j_{ik}, j^{sa}}^{DOST} = \sum_{k=i}^{\binom{()}{l}} \sum_{(j_{ik}=j_{sa}^{ik})}^{\binom{()}{n_{ik}-i+1}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{\binom{()}{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}} \sum_{n_{sa}=n-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=0}^{(\cdot)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n-k_1+1)}^{(\cdot)} \sum_{n_{sa}=n-k_1-k_2+j_{ik}-j_{sa}-k_2}$$

$$\frac{(n_i - s - k_1 - k_2)!}{(n_i - j_{sa} - k_1 - k_2)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i^l \wedge l_s \leq D - i^l - l_s$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - j_{sa}^{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_s + j_{sa}^{ik} - j_{sa} =$$

$$l_{ik} \leq D + j_{sa}^{ik} - j_{sa} \wedge l_i \leq D + s - n$$

$$D \geq n < n \wedge l = k_1 + k_2 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq n + k \wedge$$

$$z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik} j_{sa}}^{DOST} = \sum_{k=i^l} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(l_{sa}+j_{sa}^{ik}-i^l-j_{sa}+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2} - 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{ik} - l_i - j_{sa})!}{(l_{ik} - j_{ik} - l_i + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot$$

$$\frac{(j_{sa} - l_{sa} - s)!}{(D + s - n - 1)! \cdot (n - s)!} \cdot$$

$$\sum_{k=1}^i \sum_{l=1}^{(i)} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{(i)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}}$$

$$\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_i = (i - 1 + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k=i}^l \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{j_{sa} = j_{sa}^{i+1}}^{(l_{ik} - i^{l+1})} \dots$$

$$\sum_{n_i = n+k}^{(n_i = n+k_1 - 1)} \sum_{(n_{ik} = n+k_2 - j_{sa}^{i+1})} \sum_{n_{sa} = n - j_{sa}^{i+1}}^{j_{sa} - k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(n_i - 2)! \cdot (n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{sa} - k_2 - 1)!}{(j_{sa} - j_{sa}^{i+1} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

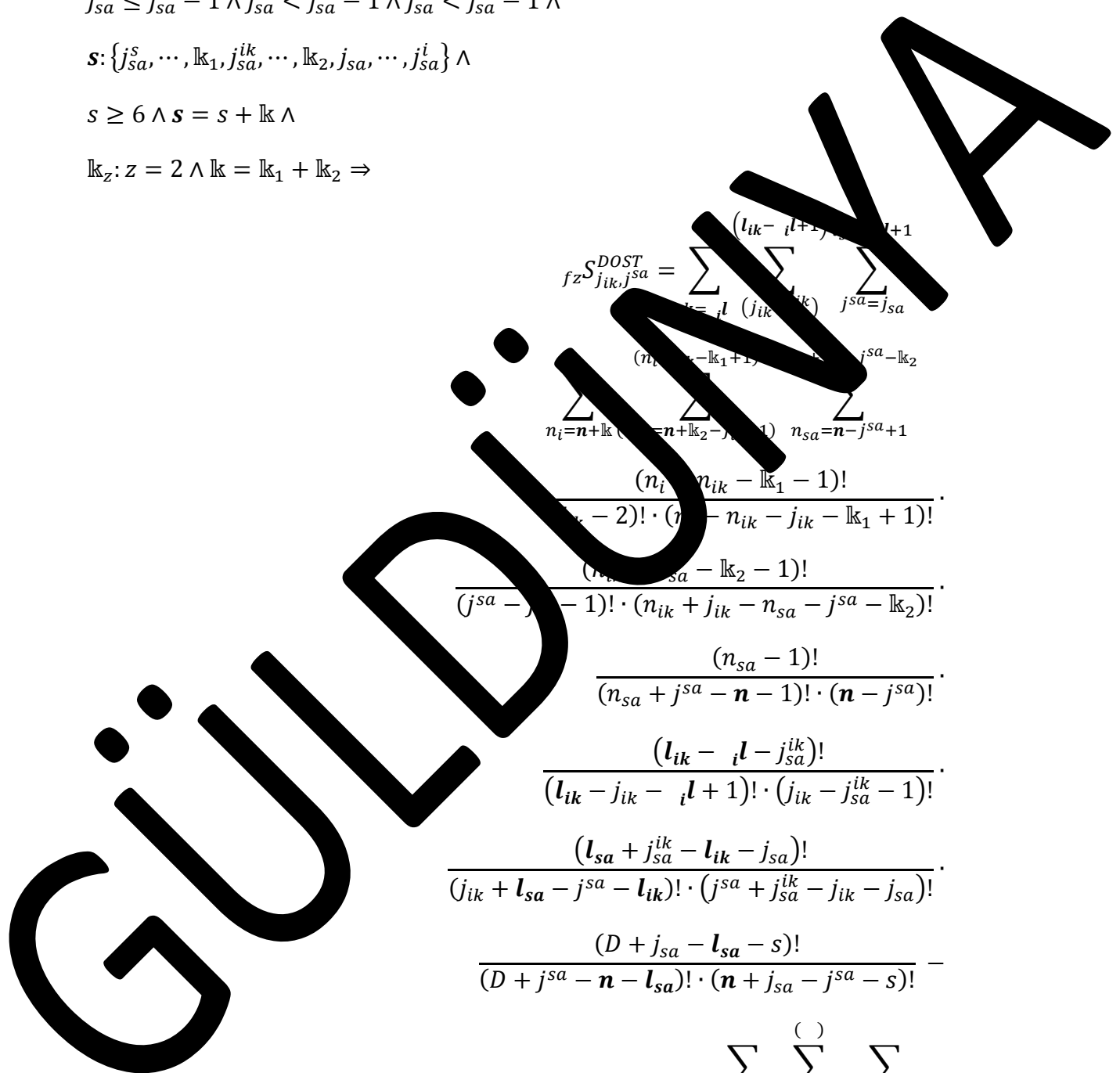
$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=i}^l \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{j_{sa} = j_{sa}^i}$$

$$\sum_{n_i = n+k}^n \sum_{(n_{ik} = n_i - j_{ik} - k_1 + 1)}^{()} \sum_{n_{sa} = n_{ik} + j_{ik} - j_{sa} - k_2}$$



$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = {}_i l \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{i=l}^n \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{l_{ik}+j_{sa}-i-l-j_{sa}^{ik}+1} \sum_{j_{sa}=j_{sa}}^{l_{ik}+j_{sa}-i-l-j_{sa}^{ik}+1} f_z S_{j_{ik} j_{sa}}^{D O S}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - {}_i l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - {}_i l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) +$$

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$$\begin{aligned}
 & \left(\sum_{k=i^l}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-i^l-j_{sa}^{ik}+1} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - i^l - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}{(j_{ik} + l_{k_1} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=i^l}^{(l_{ik}-i^{l+1})} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=l_{ik}+j_{sa}-i^l-j_{sa}^{ik}+2}^{l_{sa}-i^{l+1}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} -$$

$$\sum_{k=i}^n \sum_{l}^{(i)} (j_{ik} = j_{sa}^{ik}) \sum_{j_{sa} = j_{sa}^{ik}}^{(i)} \frac{(n_i - n_{ik} - l_{k_1} - l_{k_2})!}{(n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \cdot \frac{(D + s - n - l_i)!}{(n - s)!}$$

$$D \geq n < n \wedge l = i \wedge l_{sa} \leq D + j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j_{sa} \leq j_{ik} + j_{sa} - s$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = i > 0 \wedge$$

$$j_{sa} \leq j_{sa} - j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^s, j_{sa}^{ik}\} \wedge$$

$$s \geq 6, s = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + 1 \Rightarrow$$

$$f_{zS}^{DOST}_{j_{ik}j_{sa}} = \left(\sum_{k=i}^n \sum_{l}^{(i)} (l_{ik} - l_{l+1}) \sum_{(j_{ik} = j_{sa}^{ik})} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{n_i = n + l_{k_1}}^n \sum_{(n_{ik} = n + l_{k_2} - j_{ik} + 1)}^{(n_i - j_{ik} - l_{k_1} + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - l_{k_2}} \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \right)$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\left(\sum_{k=1}^{(l_{ik} - i^l + 1)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{l_{sa}-j_{sa}^{ik}+1} \right)$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{n_{ik}=n+\mathbb{k}_2}^{(n_{ik}-j_{ik}-j_{sa}^{ik}+1)} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{(n_{sa}-j_{sa}^{ik}+1)}$$

$$\frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_{ik} - i^l - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - i^l + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=1}^{()} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l = i! \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j_{sa}}^{DOST} = \sum_{k= i!} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k= i!} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - l_i)!}$$

$$\left((D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_{ik}, j^{sa}}^{DOST} &= \sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{()} \sum_{j^{sa}=j_{sa}}^{l_{sa}-i^{l+1}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 &\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \\
 &\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \\
 &\frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_{sa} + j^{sa} - 1)!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \\
 &\frac{(D + l_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 &\sum_{k=i}^l \sum_{(j_{ik}=j_{sa}^{ik})}^{()} \sum_{j^{sa}=j_{sa}} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \\
 &\frac{(n_i - s - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n - s)!} \\
 &\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

GÜLDÜZ

DİZİN

B

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.1.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.1.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.2.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.2.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.1.1/230-231

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.1.1/187-188

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.2.1/230-231

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.2.1/187-188

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.2.1/230-231

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.3.1/187-188

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.4.1.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.4.1.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.4.2.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.4.2.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.4.3.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.4.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu

simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.1.1/233

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.1.1/190

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.1.1.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.2.1/233

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.2.1/190

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.1.2.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.3.1/233

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.3.1/190

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.1.3.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.6.3.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.6.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.6.3.1/3-4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.6.2.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.6.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu

bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.6.3.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.6.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.6.3.1/3-4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin durumuna bağlı

tek kalan simetrik olasılık,
2.3.3.1.1.1.1.1/118

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.1.1/80-81

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.1.1.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin durumuna bağlı

tek kalan simetrik olasılık,
2.3.3.1.1.1.2.1/118

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.2.1/80-81

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.1.2.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin durumuna bağlı

tek kalan simetrik olasılık,
2.3.3.1.1.1.3.1/118

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.3.1/80-81

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.1.3.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.1.1.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.1.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.1.2.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.1.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.1.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.1.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.2.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.2.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.2.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.2.2.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.2.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.2.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.2.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.2.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.2.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.4.1.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.4.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.4.2.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.4.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.4.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.4.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.6.1.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.6.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.6.2.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.6.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.6.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.6.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.7.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.7.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.7.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
bağımsız simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.7.2.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.7.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.7.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.2.7.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.2.7.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.2.7.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrisinin ilk
ve herhangi bir durumunun bulunabileceği
olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.1.1.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.1.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin ilk ve herhangi bir durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.1.2.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.1.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrisinin ilk ve herhangi bir durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.1.3.1.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.1.3.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.1.3.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
simetrisinin ilk ve herhangi bir durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.2.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.2.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.2.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrisinin ilk ve herhangi bir
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.2.2.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.2.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.2.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk ve herhangi bir
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.2.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.2.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrisinin
herhangi iki durumuna bağlı

tek kalan simetrik olasılık,
2.3.3.1.4.1.1.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.4.1.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.4.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin herhangi iki durumuna bağlı

tek kalan simetrik olasılık,
2.3.3.1.4.1.2.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.4.1.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.4.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrisinin herhangi iki durumuna bağlı

tek kalan simetrik olasılık,
2.3.3.1.4.1.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.4.1.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.4.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrisinin
herhangi iki durumunun bulunabileceği
olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.4.1.1.1/839-840

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin herhangi iki durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.4.1.2.1/839-840

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrisinin herhangi iki durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.4.1.3.1/839-840

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrisinin ilk
ve herhangi iki durumunun bulunabileceği
olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.5.1.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.5.1.1.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.5.1.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin ilk ve herhangi iki durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.5.1.2.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.5.1.2.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.5.1.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrisinin ilk ve herhangi iki durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.5.1.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.5.1.3.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.5.1.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
simetrisinin ilk ve herhangi iki durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.5.2.1.1/6

tek kalan düzgün simetrik olasılık,
2.3.3.2.5.2.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.5.2.1.1/10

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrisinin ilk ve herhangi iki
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.5.2.2.1/6

tek kalan düzgün simetrik olasılık,
2.3.3.2.5.2.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.5.2.2.1/10

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk ve herhangi iki
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.5.2.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.5.2.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.2.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.1.1.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.1.2.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.1.3.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.2.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.2.2.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki

durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.2.3.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.1.1.1/4

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.1.2.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.1.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.2.1.1/6

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.2.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.2.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.2.2.1/6

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.2.2.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.2.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.2.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.2.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.4.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.4.1.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.4.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımsız simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.4.2.1/6

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.4.2.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.4.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.4.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.4.3.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.4.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.6.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.6.1.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.6.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.6.2.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.6.2.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.6.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.6.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.6.3.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.6.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.7.1.1/6

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.7.1.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.7.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
bağımsız simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.7.2.1/6

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.7.2.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.7.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.7.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.7.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.7.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrisinin ilk
herhangi bir ve son durumunun
bulunabileceği olaylara göre herhangi bir
ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.1.1.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.1.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.1.2.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.1.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.1.3.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.1.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.2.1.1/11

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.2.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.2.2.1/11

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.2.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.2.3.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.2.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.4.1.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.4.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.4.2.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.4.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımlı simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.4.3.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.4.3.1/11

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrisinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.6.1.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.6.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrisinin ilk herhangi bir ve son

durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.6.2.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.6.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.6.3.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.6.3.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.7.1.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.7.2.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.7.3.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.7.1.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.1.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.7.1.2.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.1.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.7.1.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.1.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.7.2.1.1/7

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.2.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.7.2.2.1/7

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.2.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.7.2.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.2.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.4.1.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.4.2.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.4.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.6.1.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.6.2.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.6.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.7.1/7

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.7.2.1/7

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.7.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.1.1.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.1.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.1.2.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.2.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.1.3.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.3.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.2.1.1/15

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.2.2.1/15-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.2.3.1/9-10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.3.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi iki ve son

durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.4.1.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.4.2.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.4.3.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.3.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.6.1.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.6.2.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.6.3.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.3.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.7.1.1/15-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.7.2.1/15-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.7.3.1/9-10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.3.1/9-10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.1.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.1.2.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son

durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.1.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.3.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.1.1/17-18

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.2.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.3.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.2.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.3.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.2.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.3.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.1.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son

durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.2.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.3.1/10-11

VDOİHİ’de Olasılık ve İhtimal konularının tanım ve eşitlikleri verilmektedir. Ayrıca VDOİHİ’de olasılık ve ihtimalin uygulama alanlarına da yer verilmektedir. VDOİHİ konu anlatım ciltleri ve soru, problem ve ispat çözümlerinden oluşmaktadır. Bu cilt bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz olasılık dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu hariç dağılımın başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımın aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrisinin herhangi iki durumuna bağlı tek kalan düzgün olmayan simetrik olasılığın, tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu olasılığın herhangi iki durumuna bağlı tek kalan düzgün olmayan simetrik olasılık kapsamında, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu hariç dağılımın başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımın aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrisinin herhangi iki durumuna bağlı tek kalan düzgün olmayan simetrik olasılığın, tanım ve eşitlikleri verilmektedir.

VDOİHİ’nin diğer ciltlerinde olduğu gibi bu ciltte de verilen ana eşitlikler, olasılık tablolarından elde edilen verilerle üretilmiştir. Diğer eşitlikler ise ana eşitliklerden teorik yöntemle üretilmiştir. Eşitlik ve tanımların üretilmesinde diğer kaynak kullanılmamıştır.