VDOİHİ

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Bağımlı Durumlu Simetrinin İlk Herhangi İki ve Son Durumunun Bulunabileceği Olaylara Göre İlk Düzgün Olmayan Simetrik Olasılık

Cilt 2.3.2.3.7.1.1.8

İsmail YILMAZ

2023

Matematik / İstatistik / Olasılık

ISBN: 978-625-6525-61-0

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VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık Cilt 2.3.2.3.7.1.1.8

İsmail YILMAZ

KÜTÜPHANE BİLGİLERİ

Yılmaz, İsmail.

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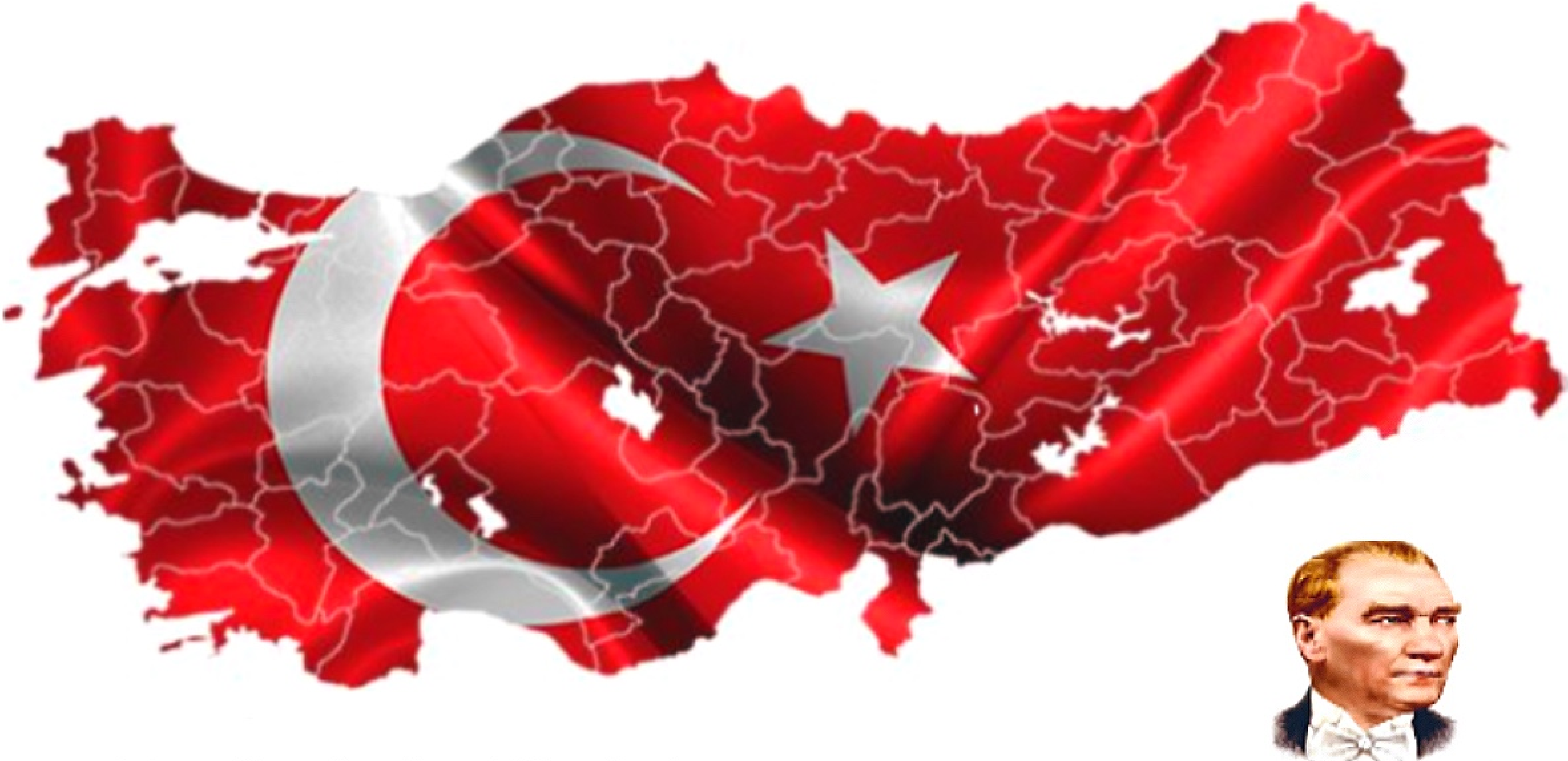
e-Basım, s. XXV + 680

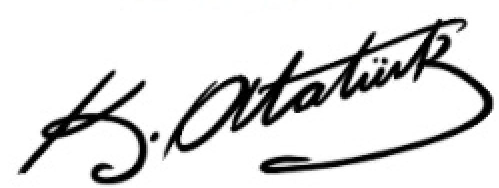
Kaynakça yok, dizin var

ISBN: 978-625-6525-61-0

1. Bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

Dili: Türkçe + Matematik Mantık





Türkiye Cumhuriyeti Devleti
Kuruluşunun
100.Yılı Anısına

DÜZELTME

Bu cilt için

$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}$

simgesi yerine

$_{fz}S^{\text{İ}so}_{j_s\ ,j_{ik},j^{sa},j_i}$

simgesi olmalı.

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 deklaritif bilgi yapılarıyla birlikte matematik mantık yapıları üzerine çalışmalar yapmıştır. Yazarın farklı alanlarda yapmış olduğu çalışmalar arasında ölçme ve değerlendirmeye yönelik çalışmaları da mevcuttur.

VDOİHİ

Veri **D**eğişkenleri **O**lasılık ve **İ**htimal **H**esaplama **İ**statistiği (VDOİHİ) ile olasılık ve ihtimal yasa konumuna getirilmiştir.

VDOİHİ'de Olasılık;

- ✓ Makinaların insan gibi düşünebilmesini, karar verebilmesini ve davranabilmesini sağlayacak gerçek yapay zekayla ilişkilendirilmiştir.
- ✓ Dillerin matematik yapısı olduğu gösterilmiştir.
- ✓ Tüm tabanlarda, tüm dağılım türlerinde ve istenildiğinde dağılım türü ve tabanı değiştirerek çalışabilecek elektronik teknolojisinin temelidir.
- ✓ Teorik kabullerle genetikle ilişkilendirilmiştir.
- ✓ Bilgi merkezli değerlendirme yöntemidir.

Sanırım bilgi ve teknolojideki kaderimiz veriyle ilişkilendirilmiş.

f

İÇİNDEKİLER

Simge ve Kısaltmalar

n: olay sayısı

$\boldsymbol{n}$: bağımlı olay sayısı

$\mathbb{m}$: bağımsız olay sayısı

ι: bağımsız durum sayısı

I: simetrinin bağımsız durum sayısı

$\mathbb{l}$: simetrinin bağımlı durumlarından önce bulunan bağımsız durum sayısı

$\boldsymbol{I}$: simetrinin bağımlı durumlarından sonra bulunan bağımsız durum sayısı

$\mathbb{k}$: simetrinin bağımlı durumları arasındaki bağımsız durumların sayısı

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

$\boldsymbol{l}$: ilgilenilen bağımlı durumun, bağımlı olasılıklı farklı dizilimsiz dağılımlarındaki sırası

$_{i}\boldsymbol{l}$: simetrinin ilk bağımlı durumunun, bağımlı olasılık farklı dizilimsiz dağılımın son olayı için sırası. Simetrinin sonuncu bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlarındaki sırası

$\boldsymbol{l_i}$: simetrinin son bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası. Simetrinin birinci bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlarındaki sırası

$\boldsymbol{l_s}$: simetrinin ilk bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası. Simetrinin sonuncu bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlarındaki sırası

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

$\boldsymbol{l_{sa}}$: simetrinin aranacağı bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası. Simetrinin aranacağı bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlarındaki sırası

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

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

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

j_{ik}: simetrinin ikinci olayındaki durumun, gelebileceği olasılık dağılımlarındaki olayın sırası (son olaydan ilk olaya doğru) veya simetride, simetrinin aranacağı durumdan önce bulunan bağımlı durumun, bağımlı olasılıklı dağılımlarda bulunabileceği olayların, son olaydan itibaren sırası veya simetrinin iki bağımlı durum arasında bağımsız durumun bulunduğunda bağımsız durumdan önceki bağımlı durumun bağımlı olasılıklı dağılımlarda bulunabileceği olayların son olaydan itibaren sırası

j_{sa}^{ik}: $\mathrm{j_{ik}}$'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}: $\mathrm{j_{sa}}$'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

$\boldsymbol{s}$: 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

${}_{fz}S_{j_i}^{\dot{I}S}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

${}_{fz}S_{j_i,0}^{\dot{I}S}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

${}_{fz}S_{j_i,D}^{\dot{I}S}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

${}_{fz}^{0}S_{j_i}^{\dot{I}S}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu simetrinin son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

${}_{fz}^{0}S_{j_i,0}^{\dot{I}S}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

${}_{fz}^{0}S_{j_i,D}^{\dot{I}S}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

${}_{fz}S^{\text{İS}}_{j^{sa}}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin durumuna bağlı ilk simetrik olasılık

${}_{fz}S^{\text{İS}}_{j^{sa},0}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin durumuna bağlı ilk simetrik olasılık

${}_{fz}S^{\text{İS}}_{j^{sa},D}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin durumuna bağlı ilk simetrik olasılık

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${}_{fz,0}S^{\dot{I}SS}_{j_s,j_{ik},j^{sa},j_i,0}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

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${}^{0}_{fz}S^{\dot{I}SS}_{j_s,j_{ik},j^{sa},j_i,D}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

${}_{fz}S^{\dot{I}SO}_{j_i}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

${}_{fz}S^{\dot{I}SO}_{j_i,0}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

${}_{fz}S^{\dot{I}SO}_{j_i,D}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

${}^{0}_{fz}S^{\dot{I}SO}_{j_i}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu simetrinin son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

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${}_{fz}S^{\dot{I}SO}_{j^{sa}}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin durumuna bağlı ilk düzgün olmayan simetrik olasılık

${}_{fz}S^{İSO}_{j^{sa},0}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin durumuna bağlı ilk düzgün olmayan simetrik olasılık

${}_{fz}S^{İSO}_{j^{sa},D}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin durumuna bağlı ilk düzgün olmayan simetrik olasılık

${}_{fz}S^{İSO}_{j_s,j_i}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

${}_{fz}S^{İSO}_{j_s,j_i,0}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan 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**

Bağımlı dağılım ve bir bağımsız olasılıklı durumla oluşturulabilecek dağılımlara ve bağımlı olasılıklı dağılımların kendi olay sayısından (bağımlı olay sayısı) bir büyük olaylara (bağımsız olay sayısı) dağılımıyla bağımlı ve bir bağımsız olasılık dağılımlar elde edilir. Bağımlı dağılım farklı dizilimsiz dağılımdan oluştuğunda, bu dağılımlara bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlar denir. Bağımlı ve bir bağımsız olasılıklı dağılımlar; bağımlı dağılımlara, bağımsız durumlar ilk olaydan dağıtılmaya başlanarak tabloları elde edilir. Bu bölümde verilen eşitlikler, bu yöntemle elde edilen kurallı tablolara göre verilmektedir. Farklı dizilimsiz dağılımlarda durumların küçükten-büyüğe sıralanmasıyla elde edilebilen kurallı tablolar kullanılmaktadır. Farklı dizilimsiz dağılımlarda durumların küçükten-büyüğe sıralama için verilen eşitliklerde kullanılan durum sayısının düzenlenmesiyle, büyükten-küçüğe sıralama durumlarının eşitlikleri elde edilebilir.

Farklı dizilimsiz dağılımlar, dağılımın ilk durumuyla başlayan (bunun yerine farklı dizilimli dağılımlarda simetrinin ilk durumuyla başlayan dağılımlar), dağılımın ilk durumu haricinde dağılımın herhangi bir durumuyla başlayan dağılımlar (bunun yerine farklı dizilimli dağılımlarda simetride bulunmayan bir durumla başlayan dağılımlar) ve dağılımın ilk durumu hariç olasılık dağılımının başladığı farklı ikinci durumla başlayıp simetrinin ilk durumuyla başlayan dağılımların sonuna kadar olan dağılımlarda (bunun yerine farklı dizilimli 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 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 tanımları ve eşitlikleri verilmektedir.

Farklı dizilimsiz dağılımlarda simetrinin durumlarının olasılık dağılımındaki sırası, 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 durumların bulunabileceği olaylara göre çıkarılan eşitlikler kullanılacaktır. Bu eşitlikler, bir bağımlı ve bir bağımsız olasılıklı dağılımlar için VDOİHİ Cilt 1'de çıkarılan eşitliklerle birleştirilerek, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımların yeni eşitlikleri elde edilecektir. Eşitlikleri adlandırılmasında da bağımlı olasılıklı farklı dizilimsiz dağılımlarda kullanılan adlandırmalar kullanılacaktır. Bu adların başına 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 durumlu [illegible] /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 [illegible] sınır değerleri, simetrinin küçükten-büyüğe 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 düzenlenerek büyükten-küçüğe sıralanan dağılımlar için de simetrik olasılık eşitlikleri elde edilir.

Bu ciltte bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu [illegible] bağımlı olasılıklı dağılımın ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılığın eşitlikleri verilmektedir.

SİMETRİDEN SEÇİLEN DÖRT DURUMA GÖRE İLK DÜZGÜN OLMAYAN SİMETRİK OLASILIK

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i} \right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(j_i + j_{sa} - s - 1)} \sum_{j_i = s + 2}^{\boldsymbol{l_{sa}} + j_{sa} - s}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{[illegible]}\ \sum_{(j_s=[illegible]-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}[illegible]}\ \sum_{[illegible]^{sa}=j_{sa}+1}^{[illegible]_{sa})}\ \sum_{j_i=\boldsymbol{l_{sa}}+j_{sa}-s+1}^{\boldsymbol{l_i}}$$

$$\sum_{[illegible]\boldsymbol{n}+\mathbb{k}}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s[illegible]}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(j_i + j_{sa} - s - 1)} \sum_{j_i = s + 2}^{\boldsymbol{l_{ik}} + j_{sa}^{ik} - s}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s \text{[illegible]})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} \text{[illegible]} j^{sa} - s)!} \cdot$$

$$\frac{(\text{[illegible]} \boldsymbol{l_i})!}{(D + j \text{[illegible]} - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\text{[illegible]} j_i)!} +$$

$$\sum_{\text{[illegible]}} \sum_{(j_s \text{[illegible]} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{\text{[illegible]} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{\text{[illegible]} = j_{sa} + 1)}^{(\boldsymbol{l_{ik}} \text{[illegible]} - j_{sa}^{ik})} \sum_{j_i = \boldsymbol{l_{ik}} + j_{sa}^{ik} - s + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n \text{[illegible]} + \mathbb{k}}^{\text{[illegible]}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s \text{[illegible]})} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

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

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

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

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

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

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$$S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=s+2}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-\text{[illegible]})!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-\text{[illegible]}-j_{sa})!}\cdot$$

$$\frac{(\text{[illegible]}\boldsymbol{l}\text{[illegible]})!}{(D+j\text{[illegible]}\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\text{[illegible]}j_i)!}+$$

$$\sum_{\text{[illegible]}}^{\text{[illegible]}}\ \sum_{(\text{[illegible]}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\text{[illegible]}}\ \sum_{(j\text{[illegible]}j_i+j_{sa}-s)}^{(\text{[illegible]})}\ \sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1}^{\boldsymbol{l_i}}$$

$$\sum_{n\text{[illegible]}+\mathbb{k}}^{\text{[illegible]}}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s\text{[illegible]})}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

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

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

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

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

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

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\right\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$${}_{j}S_{\ldots a,j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)}\sum_{j_i=s+2}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s \text{[illegible]})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - \text{[illegible]} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} \text{[illegible]})!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}} \text{[illegible]})! \cdot (j_i + j_{sa} \text{[illegible]} - s)!} \cdot$$

$$\frac{(\text{[illegible]} \boldsymbol{l_i})!}{(\text{[illegible]} - \boldsymbol{n} - \text{[illegible]})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{\text{[illegible]}+1}^{\text{[illegible]}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{\text{[illegible]})}$$

$$\sum_{j_{ik} \text{[illegible]}}^{\boldsymbol{l_{ik}}} \sum_{\text{[illegible]} j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i = \boldsymbol{l_{ik}} + j_{sa}^{ik} - s + 1}^{\boldsymbol{l_i}}$$

$$\sum_{\text{[illegible]} \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-\text{[illegible]})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})\text{[illegible]}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\text{[illegible]}\boldsymbol{n}-j_i)!}$$

$$\sum_{\text{[illegible]}=1}^{\text{[illegible]}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}\text{[illegible]}}^{(\text{[illegible]}}$$

$$\sum_{\text{[illegible]}-j_{sa}^{ik}+1}^{j^{sa}+j_s\text{[illegible]}}\ \sum_{\text{[illegible]}^{sa}=j_i+j_{sa}-s)}^{(\ \ )}\ \sum_{j_i=s+2}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}$$

$$\sum_{n_i\text{[illegible]}\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\text{[illegible]}+1)}^{(\text{[illegible]}j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\text{[illegible]}_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(\text{[illegible]}_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}\colon \left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z\colon z=3 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{\text{[illegible]}}\sum_{(j_s=j_{ik}-j_{sa}\text{[illegible]})}^{\text{[illegible]}}$$

$$\sum_{\text{[illegible]}k=j^{sa}+j\text{[illegible]}j_{sa}}^{\text{[illegible]}}\sum_{(j^{sa}=j_{sa}\text{[illegible]})}^{(\boldsymbol{l_s}\text{[illegible]}-1)}\sum_{\text{[illegible]}=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n\text{[illegible]}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\text{[illegible]}+1)}^{\text{[illegible]}-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}\text{[illegible]}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\;)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\text{[illegible]}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})\text{[illegible]}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,\text{[illegible]}\,\boldsymbol{n}-j_i)!}$$

$$\sum_{\text{[illegible]}=1}^{\text{[illegible]}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}\text{[illegible]})}^{(\text{[illegible]}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}\text{[illegible]}}^{\text{[illegible]}}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\text{[illegible]}}\ \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i\text{[illegible]}\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\text{[illegible]}+1)}^{(\text{[illegible]}j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\text{[illegible]}n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(\text{[illegible]}_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i} \right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$fz[illegible]j_{ik}, j^{sa}, j_i[illegible] = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{[illegible]} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{[illegible]} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+[illegible]\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})[illegible]}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})![illegible]\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{[illegible]}\sum_{(j_s[illegible]}^{(\boldsymbol{l_s})}$$

$$\sum_{j[illegible]j^{sa}+j_{sa}^{ik}-[illegible]}\sum_{(j^{sa}=j_i+j_{sa}[illegible]}^{([illegible]}\sum_{[illegible]=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i[illegible]+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}[illegible]+1)}^{[illegible]j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{i}[illegible]-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}\colon \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z\colon z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{[illegible]} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-[illegible]\right)}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)[illegible]}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}[illegible]{}^{sa}-s)!}\cdot$$

$$\frac{(D[illegible])!}{(D+j[illegible]\boldsymbol{n}-\boldsymbol{l_i})!\cdot([illegible]j_i)!}+$$

$$\sum\sum_{[illegible]j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}[illegible]+1}^{\boldsymbol{l_s}+j_{sa}^{[illegible]}}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n[illegible]+\mathbb{k}}^{n[illegible]}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s[illegible])}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{[illegible]=1}^{[illegible]}\ \sum_{(j_s=j_{i[illegible]}j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{[illegible]}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=[illegible]_{sa}-s)}^{(\ )}\ \sum_{j_i=s+2}^{[illegible]-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{[illegible]}\ \sum_{(n_{i[illegible]}+\mathbb{k}-j_s+1)}^{(n_i[illegible]+1)}\ \sum_{[illegible]=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{[illegible]-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=[illegible]\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+[illegible]-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{([illegible]_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \land$

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

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

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

$D \geq \boldsymbol{n} < n \land I = \Bbbk > 0 \land$

$j_{sa} = j_{sa}^{i} - 1 \land j_{sa}^{ik} = j_{sa} - 1 \land j_{sa}^{s} < j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \land$

$s \geq 5 \land \boldsymbol{s} = s + \Bbbk \land$

$\Bbbk_z: z = 3 \land \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{[illegible]} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{[illegible]} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-[illegible])!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{[illegible]}\sum_{(j_s[illegible])}^{(\boldsymbol{l_s})}$$

$$\sum_{[illegible]k=j^{sa}+j_s[illegible]j_{sa}}^{[illegible]}\sum_{(j^{sa}=j_{sa}[illegible])}^{[illegible])}\sum_{[illegible]=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i[illegible]+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}[illegible]+1)}^{[illegible]-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{i}[illegible]-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(j_{ik}-j_{sa}^{ik})}\sum_{(j_s=2)}^{\text{[illegible]}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}\text{[illegible]}-s)}^{(\ \ )}\ \sum_{\text{[illegible]}=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}\text{[illegible]})}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}\text{[illegible]}+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\text{[illegible]}}$$

$$\sum_{(n\text{[illegible]}\boldsymbol{n}+\mathbb{k}_3-j\text{[illegible]})}^{(n_{ik}+\text{[illegible]}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{\text{[illegible]}+j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\text{[illegible]})!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i} \right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$j\,[illegible], j_{i}\,[illegible] = \sum_{[illegible]}^{[illegible]} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+[illegible])}$$

$$\sum_{j_{ik}=j_{sa}^{[illegible]}}^{[illegible]+j_{sa}^{ik}-j_{sa}-[illegible]} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\;)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_{[illegible]}=[illegible]+\mathbb{k}}^{[illegible]} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s[illegible])} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum^{\boldsymbol{l_{ik}}}_{j_{ik}=j_{sa}^{ik}+1}\sum^{(\ )}_{(j^{sa}=j_{sa}^{ik}+j_{sa}-s)}\sum_{j_i=\boldsymbol{l_s}+s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j^{ik}_{\text{[illegible]}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{\text{[illegible]}}} \sum_{(j^{sa}=j_i \text{[illegible]})}^{(\;)} \sum_{\text{[illegible]}=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is} \text{[illegible]} \mathbb{k}-j_{\text{[illegible]}})}^{(n_i-j_s+1)} \sum_{\text{[illegible]}=\boldsymbol{n}+\text{[illegible]}+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_{\text{[illegible]}}}$$

$$\sum_{(n_{sa} \text{[illegible]}+\mathbb{k}_3-j^{s\text{[illegible]}})}^{(n_{ik}+j_{\text{[illegible]}}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}\text{[illegible]}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - \text{[illegible]})! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - \text{[illegible]}_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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

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

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

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

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

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s \text{[illegible]})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s \text{[illegible]} j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} \text{[illegible]}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(\text{[illegible]} + j_{sa}^{ik} - j_{ik} \text{[illegible]} j_{sa}\right)!} \cdot$$

$$\frac{(\text{[illegible]} + j_{sa} - \boldsymbol{l_{sa}} \text{[illegible]} s)!}{(j^{sa} + \boldsymbol{l_i} - \text{[illegible]} \boldsymbol{l_{sa}} \text{[illegible]} (j_i + j_s \text{[illegible]} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i \text{[illegible]} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\ldots\right)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}\ldots)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})\ldots(j_i+j_{sa}-\ldots-s)!}\cdot$$

$$\frac{(D\ldots\boldsymbol{l_i})!}{\ldots+j_i\ldots\boldsymbol{n}-\boldsymbol{l_i}\ldots(\boldsymbol{n}-j_i)!}+$$

$$\sum_{\ldots=1}^{\ldots}\ \sum_{(j_s=2)}^{(\ldots j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}\ldots j_{sa}+1}^{j^{sa}+j_{sa}^{ik}-j_s\ldots 1}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)}\ \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{\ldots=\boldsymbol{n}+\mathbb{k}}^{\ldots}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{[illegible]}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})[illegible]}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot[illegible]\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=1}\ \sum_{(j_s=2)[illegible]}^{([illegible]-j_{sa}^{ik})}$$

$$\sum_{j_{ik}[illegible]sa+j_{sa}^{ik}-j_{[illegible]}}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{([illegible])}\ \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=[illegible]\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-[illegible]+1)}^{(n[illegible]+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{[illegible]_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{([illegible]_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

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

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

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

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

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

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\right\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$${}_{j}S_{[illegible]a,j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\;\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\;\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\;\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\;\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\;\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s \text{[illegible]})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} \text{[illegible]} j^{sa} - s)!} \cdot$$

$$\frac{(\text{[illegible]} - \boldsymbol{l_i})!}{(D + \text{[illegible]} - \boldsymbol{n} - \boldsymbol{l_i} \text{[illegible]} - j_i)!}$$

$D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \land$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j \text{[illegible]} \leq j^{sa} + j_{sa} \text{[illegible]} j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \text{[illegible]}^{sa} + s - j \text{[illegible]} \leq j_i \leq \text{[illegible]}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \land \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \text{[illegible]} \land \boldsymbol{l_i} + j_{sa} - \text{[illegible]} \boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n \land I = \mathbb{k} > 0 \land$

$j_{sa} = j_{sa}^{i} - 1 \land j_{sa}^{ik} = j_{sa} - \text{[illegible]} \land j_{sa}^{s} < j_{sa} \text{[illegible]} 1 \land$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, \text{[illegible]}\} \land$

$s \geq 5 \land \boldsymbol{s} = s + \text{[illegible]} \land$

$\mathbb{k}_{\text{[illegible]}}: z = 3 \land \text{[illegible]} = \mathbb{k}_1 + \text{[illegible]} + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_{ik}} + j_{sa}^{ik} - s)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

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

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

$$\frac{([illegible] - 1)!}{(n_s + [illegible] - \boldsymbol{n} - 1)! \cdot ([illegible] - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - [illegible])! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + [illegible] - \boldsymbol{l_{sa}} [illegible])!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{([illegible] - \boldsymbol{l_i})!}{(D [illegible] j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D [illegible] s - [illegible]$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s [illegible] - 1 \leq j_{ik} [illegible] j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - [illegible] \land j^{sa} + s [illegible] j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}} - j_{sa} + 1 = \boldsymbol{l_s} \land [illegible] + j_{sa}^{ik} - j_{sa} > [illegible] \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n \land I [illegible] \Bbbk > 0$

$j_{sa} = [illegible] - 1 \land j_{sa}^{ik} = [illegible] - 1 \land j_{sa} < j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, [illegible] j_{sa}^{ik}, \Bbbk_2, j_s [illegible] \Bbbk_3, j_{sa}^{i}\} \land$

$s \geq [illegible] s = s + [illegible]$

$\Bbbk_z: z = 3 \land [illegible] = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(\;)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{(j^{sa} = j_{sa} + 2)}^{(\boldsymbol{l_{ik}} + j_{sa}^{ik} - s)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-\Bbbk_2-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-\Bbbk_3-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{\left(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1\right)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} = j_s - 1 \wedge j_{sa}^{ik} = j_{ik} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge S = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} \text{[illegible]} n_s - j_i)!} \cdot$$

$$\frac{(\text{[illegible]} - 1)!}{(n_s + \text{[illegible]} - \boldsymbol{n} - 1)! \cdot (\text{[illegible]} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - \text{[illegible]})! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\text{[illegible]} \boldsymbol{l_{sa}} + j_{sa} \text{[illegible]} \boldsymbol{l_{ik}} - j_{sa} \text{[illegible]})!}{(j_{ik} + \boldsymbol{l_{sa}} - j \text{[illegible]} \boldsymbol{l_{ik}})! \cdot (\text{[illegible]} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\text{[illegible]} - \boldsymbol{l_i})!}{(D \text{[illegible]} j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq$ [illegible] $+ s - \boldsymbol{n}$ [illegible]

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s +$ [illegible] $- 1 \leq j_{ik} \leq$ [illegible] $+ j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq$ [illegible] $\leq j_i + j_{sa} -$ [illegible] $\wedge j^{sa} + s$ [illegible] $j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}$ [illegible] $+$ [illegible] $= \boldsymbol{l_s} \wedge$ [illegible] $+ j_{sa}^{ik} - j_{sa} =$ [illegible] $\boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I$ [illegible] $\mathbb{k} > 0$ [illegible]

$j_{sa} =$ [illegible] $- 1 \wedge j_{sa}^{ik} =$ [illegible] $- 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots,$ [illegible] $j_{sa}^{ik}, \mathbb{k}_2, j_s$ [illegible] $\mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq$ [illegible] $= s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge$ [illegible] $= \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_s} + j_{sa} - 1)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-\mathbb{k}_3-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\mathbf{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}} $$

$$ \sum_{n_i=\mathbf{n}+\Bbbk}^{n} \sum_{(n_{is}=\mathbf{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\Bbbk_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1} $$

$$ \sum_{(n_{sa}=\mathbf{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3} $$

$$ \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot $$

$$ \frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot $$

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

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

$$ \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot $$

$$ \frac{(\mathbf{l_s}-2)!}{(\mathbf{l_s}-j_s)!\cdot(j_s-2)!}\cdot $$

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

$$ \frac{(D-\mathbf{l_i})!}{(D+j_i-\mathbf{n}-\mathbf{l_i})!\cdot(\mathbf{n}-j_i)!}+ $$

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

$$ \sum_{j_{ik}=j_{sa}^{ik}+1}^{\mathbf{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=\mathbf{l_s}+j_{sa})}^{(\mathbf{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}} $$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\Bbbk_3-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>0\wedge\boldsymbol{l_i}\leq D+j_i-\boldsymbol{n}\wedge$

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

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

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

$D\geq\boldsymbol{n}<n\wedge I=\Bbbk>0\wedge$

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

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\Bbbk_1,j_{sa}^{ik},\Bbbk_2,j_{sa},\Bbbk_3,j_{sa}^{i}\right\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\Bbbk\wedge$

$\Bbbk_z:z=3\wedge\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3\Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-\mathbb{k}_3-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j^{ik}_{sa}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j^{ik}_{sa}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 0 \wedge \boldsymbol{l_i} \leq D + \boldsymbol{l_s} - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \left\{j^{s}_{sa}, \cdots, \mathbb{k}_1, j^{ik}_{sa}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j^{i}_{sa}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

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

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-\mathbb{k}_3-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + \boldsymbol{l_s} - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}\ \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot
$$

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

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

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1}\ \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\mathbb{k}_3-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>0\wedge\boldsymbol{l_i}\leq D+j_i-\boldsymbol{n}\wedge$

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

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

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

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

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

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\right\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}\ \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_i=j^{sa}+s-2}
$$

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

$$
\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

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

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

$$
\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

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

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\mathbf{n}-\boldsymbol{l_i})!\cdot(\mathbf{n}-j_i)!}+
$$

$$
\sum_{k=1}\ \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-\mathbb{k}_3-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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

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

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

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

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

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{[illegible]} \sum_{([illegible]=2)}^{([illegible]_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=[illegible]}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}[illegible]-1)} \sum_{[illegible]j^{sa}+s-j_{sa}+1}^{[illegible]}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{[illegible]} \sum_{(n_{is}[illegible]+\mathbb{k}-j_s+1)}^{(n_i-[illegible]1)} \sum_{[illegible]=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{[illegible]-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=[illegible]\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+[illegible]-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{([illegible]_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

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

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

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

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

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

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=[illegible]}^{[illegible]} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=[illegible]+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_s}+[illegible])}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{[illegible]}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{([illegible]\boldsymbol{n}+\mathbb{k}-j_s+[illegible])}^{(n_{[illegible]}+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{[illegible]+j_{[illegible]}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=[illegible]_3-j^{sa}+1)}^{(n_{ik}[illegible]-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\ldots - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=j_{sa}+\text{[illegible]})}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{\text{[illegible]}-j_{sa}}^{\text{[illegible]}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\text{[illegible]})}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}\text{[illegible]}+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\text{[illegible]}}$$

$$\sum_{(n_s\text{[illegible]}\boldsymbol{n}+\mathbb{k}_3-j^{s}\text{[illegible]})}^{(n_{ik}+\text{[illegible]}j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{\text{[illegible]}+j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\text{[illegible]})!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-\text{[illegible]}_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1} \sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1} \sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{\text{[illegible]}} = \sum_{\text{[illegible]}} \sum_{(j_s = \text{[illegible]} - j_{sa}^{ik} + 1)}^{(\ \ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa} = \text{[illegible]} + j_{sa} - j_{sa}^{ik})}^{(\text{[illegible]})} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{\text{[illegible]} + \mathbb{k}}^{\text{[illegible]}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s \text{[illegible]})} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

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

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

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

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

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

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$$S_{j_s,j_{[illegible]},j_i}=\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{[illegible]_{ik}=j_{sa}^{ik}+1}^{[illegible]k}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s\ [illegible])!}\cdot$$

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

$$\frac{([illegible]-\boldsymbol{l_i})!}{(D+[illegible]-\boldsymbol{n}-\boldsymbol{l_i})!\cdot([illegible]-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$ [illegible]

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

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

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} -$ [illegible] $\wedge\ j_{sa}^{s} < j_{sa}^{ik}$ [illegible] $1 \wedge$

$\boldsymbol{s}\colon\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}$ [illegible] $\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s +$ [illegible]

$\mathbb{k}$ [illegible] $z = 3 \wedge$ [illegible] $= \mathbb{k}_1 +$ [illegible] $+ \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{\left(j_s=j_{ik}-j_{sa}^{ik}+1\right)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s - \boldsymbol{n} - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

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

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - \text{[illegible]})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \text{[illegible]} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} \text{[illegible]} - s)!} \cdot$$

$$\frac{(\text{[illegible]} - \boldsymbol{l_i})!}{(\text{[illegible]} + j_i - \boldsymbol{n} \text{[illegible]})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + \text{[illegible]} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} \text{[illegible]} s - j_{sa} \leq j_i \leq \text{[illegible]} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \text{[illegible]} \wedge \boldsymbol{l_i} \text{[illegible]} - s > \text{[illegible]} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0$ [illegible]

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge$ [illegible] $< j_{sa}^{ik} - 1$ [illegible]

$\boldsymbol{s}: \{j_{sa}^{s}, \text{[illegible]}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \text{[illegible]}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s$ [illegible] $\mathbb{k} \wedge$

$\mathbb{k}_z$: [illegible] $= 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$ [illegible]

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\mathbf{n}-\boldsymbol{l_i})!\cdot(\mathbf{n}-j_i)!}$$

$D \ge \mathbf{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \le D + s - \mathbf{n} \wedge$

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

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \mathbf{n} \wedge$

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

$D \ge \mathbf{n} < n \wedge I = \Bbbk > 0 \wedge$

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

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$\boldsymbol{s} \ge 3 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\;\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})}\;\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\;\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\;\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\;\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} + 1 \leq \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z : z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1} \sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot $$

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

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

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot $$

$$ \frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} + $$

$$ \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})} $$

$$\sum_{j_{ik}=\mathbf{l_s}+j_{sa}^{ik}}^{\mathbf{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\;)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\Bbbk}^{n} \sum_{(n_{is}=\mathbf{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\mathbf{l_s}-2)!}{(\mathbf{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\mathbf{l_{ik}}-\mathbf{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\mathbf{l_{ik}}-j_{ik}-\mathbf{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\mathbf{l_i})!}{(D+j_i-\mathbf{n}-\mathbf{l_i})!\cdot(\mathbf{n}-j_i)!}$$

$D \ge \mathbf{n} < n \wedge 1 \le \mathbf{l_i} \le D + s - \mathbf{n} \wedge$

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

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \mathbf{n} \wedge$

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

$D \ge \mathbf{n} < n \wedge I = \Bbbk > 0 \wedge$

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

$\mathbf{s}: \left\{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z : z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=[illegible])}^{([illegible]-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=[illegible]+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=[illegible]+j_{sa}-j_{sa}^{ik})}^{([illegible])} \sum_{[illegible]+j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{[illegible]\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+[illegible]+1)}^{([illegible]-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+[illegible]-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=[illegible])}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}[illegible])}^{(\ )} \sum_{j_i=j^{s[illegible]}-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}[illegible]1)}^{(n_i-j_s+1)} \sum_{n_{ik}=[illegible]+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-[illegible]}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j[illegible]1)}^{(n_{ik}+[illegible]-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{[illegible]-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - [illegible])! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-\dots}$$

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

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-\dots)}^{(n_{ik}+j_{ik}-j^{sa}-\dots}\sum_{n_s=\boldsymbol{n}-j_i+\dots}^{\dots+j^{s\dots}\dots j_i-\mathbb{k}_3}$$

$$\frac{(\dots-n_{is}\dots1)!}{(j_s\dots2)!\cdot(n_i\dots j_s+1)!}\cdot$$

$$\frac{(\dots-n_{ik}\dots\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\dots n_{is}+j_s\dots n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\dots>\boldsymbol{n}\dots\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

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

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

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

$D \geq \boldsymbol{n} < n \land I = \Bbbk > 0 \land$

$j_{sa} = j_{sa}^{i} - 1 \land j_{sa}^{ik} = j_{sa} - 1 \land j_{sa}^{s} < j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \land$

$s \geq 5 \land \boldsymbol{s} = s + \Bbbk \land$

$\Bbbk_z: z = 3 \land \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{\text{[illegible]}} \sum_{\text{[illegible]}=2)}^{\text{[illegible]}_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{\text{[illegible]}+j_{sa}-j_{sa}^{ik}+\text{[illegible]}}^{(\boldsymbol{l}\text{[illegible]}} \sum_{j_i=j^{sa}+s-j_{sa}}^{\text{[illegible]}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n\text{[illegible]}} \sum_{(n_{is}\text{[illegible]}+\Bbbk-j_s+1)}^{(n_i-\text{[illegible]}1)} \sum_{\text{[illegible]}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{\text{[illegible]}-\Bbbk_1}$$

$$\sum_{(n_{sa}\text{[illegible]}\Bbbk_3-j^{sa}+1)}^{(n_{ik}+\text{[illegible]}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{\text{[illegible]}}\sum_{(j_s=2\text{[illegible]})}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}\text{[illegible]})}^{(\boldsymbol{l_{sa}})}\sum_{\text{[illegible]}\,j^{sa}\,\text{[illegible]}-j_{sa}}^{\text{[illegible]}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{\boldsymbol{n}}\sum_{(n_{is}\text{[illegible]}+\Bbbk\text{[illegible]})}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}\text{[illegible]}+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\text{[illegible]}}$$

$$\sum_{(n_s\text{[illegible]}\boldsymbol{n}+\Bbbk_3-j^{s}\text{[illegible]})}^{(n_{ik}+\text{[illegible]}j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}\text{[illegible]}j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\text{[illegible]})!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-\text{[illegible]}_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$(D > \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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

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

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

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

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$f\,z\,\text{[illegible]}, j_{ik}, j^{sa}, j_{\text{[illegible]}} = \sum_{\text{[illegible]}k=1}^{\text{[illegible]}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{\text{[illegible]}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}\text{[illegible]}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{\text{[illegible]}a)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{\text{[illegible]}=\boldsymbol{n}+\Bbbk}^{\text{[illegible]}} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + [illegible]\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - [illegible] - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} [illegible])!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - [illegible] - s)!} \cdot$$

$$\frac{(D [illegible] \boldsymbol{l_i})!}{([illegible] + j_i [illegible] \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+[illegible]}^{\boldsymbol{l_{ik}}} \sum_{[illegible]=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{[illegible]\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\text{[illegible]}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-\text{[illegible]}^{sa}-s)!}\cdot$$

$$\frac{(D\,\text{[illegible]})!}{(D+j_i\,\text{[illegible]}\,\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\text{[illegible]}\,j_i)!}+$$

$$\sum\text{[illegible]}\sum_{\text{[illegible]}=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{\text{[illegible]}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{i\text{[illegible]}}\,j_{sa}-j_{sa}^{ik})}^{(\text{[illegible]})}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i\,\text{[illegible]}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j\,\text{[illegible]})}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-[illegible])!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}\ \sum_{(j_s=[illegible])}^{([illegible]-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=[illegible]+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-[illegible]}\ \sum_{(j^{sa}=[illegible]j_{sa}-j_{sa}^{ik})}^{([illegible])}\ \sum_{j_i=[illegible]+s-j_{sa}}$$

$$\sum_{n_i=[illegible]\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-[illegible]+1)}^{([illegible]+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{[illegible]_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{([illegible]_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

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

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$[illegible]\, S [illegible]_{ik}, j^{sa}, j_i = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{sa}} - j_{sa} + 1)}$$

$$\sum_{[illegible] j_s + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\quad)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \Bbbk}^{n} \sum_{(n_{is} = \boldsymbol{n} + \Bbbk - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \Bbbk_2 + \Bbbk_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \Bbbk_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \Bbbk_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \Bbbk_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\land\boldsymbol{l_s}>1\land\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\land$

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

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

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

$D\geq\boldsymbol{n}<n\land I=\Bbbk>0\land$

$j_{sa}=j_{sa}^{i}-1\land j_{sa}^{ik}=j_{sa}^{s}-1\land j_{sa}<j_{sa}^{ik}-1\land$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\Bbbk_1,j_{sa}^{ik},\Bbbk_2,j_{sa},\Bbbk_3,j_{sa}^{i}\}\land$

$s\geq 5\land\boldsymbol{s}=s+\Bbbk\land$

$\Bbbk_z: z=3\land\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3\Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-\Bbbk_3-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > s \wedge \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \wedge$

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

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

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

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

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

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)} $$

$$ \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}} $$

$$ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} $$

$$ \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!} \cdot $$

$$ \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot $$

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

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

$$ \frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!} \cdot $$

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

$$ \frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!} \cdot $$

$$ \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} + $$

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

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\;\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\;\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$
$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\;\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\;\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$
$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\;\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$
$$\frac{(n_i-\Bbbk-1)!}{(j_s-2)!\cdot(n_i-n_{is}-\Bbbk-j_s+1)!}\cdot$$
$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$
$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$
$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$
$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$
$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$
$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$
$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge s>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1<j_s\leq\boldsymbol{l_s}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

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

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

$D\geq\boldsymbol{n}<n\wedge I=\Bbbk>0\wedge$

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

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\Bbbk_1,j_{sa}^{ik},\Bbbk_2,j_{sa},\Bbbk_3,j_{sa}^{i}\}\wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z : z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\Bbbk_2} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

$D \geq \boldsymbol{n} < n \land I = \mathbb{k} > 0 \land$

$j_{sa} = j_{sa}^{i} - 1 \land j_{sa}^{ik} = j_{sa} - 1 \land j_{sa}^{s} < j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \land$

$s \geq 5 \land \boldsymbol{s} = s + \mathbb{k} \land$

$\mathbb{k}_z: z = 3 \land \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}, [illegible]} = \sum_{k [illegible]} \sum_{[illegible]=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j^{ik}-1 [illegible]} \sum_{(j^{sa} [illegible] +j_{sa}-j_{sa}}^{(\boldsymbol{l_{sa}})} \sum_{[illegible]+s-j_{sa}}$$

$$\sum_{[illegible]=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+[illegible]_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j[illegible]-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{\text{[illegible]}} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{\text{[illegible]}=j_s+j_{sa}^{ik}}^{\text{[illegible]}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\text{[illegible]})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\text{[illegible]}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\text{[illegible]}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\right\}$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s [illegible]} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} [illegible] j^{sa} - s)!}$$

$$\frac{[illegible] - \boldsymbol{l_i})!}{(D + [illegible] - \boldsymbol{n} - \boldsymbol{l_i} [illegible] - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{[illegible]} \leq j^{sa} + j_{sa} [illegible] j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s$ [illegible] $^{sa} + s - j_{[illegible]} \leq j_i \leq$ [illegible]

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} =$ [illegible] $\wedge \boldsymbol{l_i} + j_{sa} -$ [illegible] $\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I \;=\; \Bbbk \;>\; 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} -$ [illegible] $j_{sa}^{s} < j_{sa}$ [illegible] $1 \wedge$

$\boldsymbol{s}\colon \{ j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \Bbbk_3,$ [illegible] $\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s +$ [illegible] $\wedge$

$\Bbbk_{[illegible]} : z = 3 \wedge$ [illegible] $= \Bbbk_1 +$ [illegible] $+ \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s\;,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\;\;)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

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

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

$$\frac{(n_s - \boldsymbol{n} - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

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

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

$$\frac{(n_{s}-1)!}{(n_{s}+j_{i}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_{i})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_{s})!\cdot(j_{s}-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_{i}-\boldsymbol{l_{sa}})!\cdot(j_{i}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_{i}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_{i})!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0$ [illegible]

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_s < j_{sa}^{ik} - 1$ [illegible]

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdot, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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

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

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

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

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

$\boldsymbol{s}\colon \{j^{s}_{sa}, \cdots, \mathbb{k}_1, j^{ik}_{sa}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j^{i}_{sa}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})} $$

$$ \sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}} $$

$$ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot $$

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

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

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot $$

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

$$ \frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot $$

$$ \frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} + $$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}+j^{sa}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge s > 1 \wedge \boldsymbol{l_s} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s-1)} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_{sa}}+j_{sa}} \sum_{j_i=s+2}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

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

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

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

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_{sa}}+j_{sa}-s+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge s > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

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

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\;\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})}\;\sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\;\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\;\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\;\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge s > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ \ )} \sum_{j_i=s+2}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}\cdots}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge s > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

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

$\boldsymbol{s}: \left\{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}\text{[illegible]}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{\text{[illegible]}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-\text{[illegible]}}^{\text{[illegible]}+j_s-\text{[illegible]}\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\text{[illegible]}-j^{sa}+1)}^{\text{[illegible]}-j^{sa}-\mathbb{k}_2)} \sum_{\text{[illegible]}j_i+1}^{\text{[illegible]}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_{\text{[illegible]}} n_{is}-1)!}{(j_s \text{[illegible]} 2)! \cdot (n_i \text{[illegible]} n_{is}-j_s+1)!} \cdot$$

$$\frac{(n\text{[illegible]}-n_{ik}-1)!}{(j_{ik}\text{[illegible]}) \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i\text{[illegible]}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)! \cdot (j_s-2)!} \cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!} +$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=s+2}^{\mathbf{l_{ik}}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\mathbf{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\mathbf{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\mathbf{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\mathbf{l_s}-2)!}{(\mathbf{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\mathbf{l_i})!}{(D+j_i-\mathbf{n}-\mathbf{l_i})!\cdot(\mathbf{n}-j_i)!}$$

$D\geq\mathbf{n}<n\wedge\mathbf{l_s}+1\leq\mathbf{l_i}\leq D+s-\mathbf{n}\wedge$

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

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

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

$D\geq\mathbf{n}<n\wedge I\ =\ \Bbbk\ >\ 0\wedge$

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

$\mathbf{s}\colon\left\{j_{sa}^{s},\Bbbk_1,j_{sa}^{ik},\cdots,\Bbbk_2,j_{sa},\Bbbk_3,j_{sa}^{i}\right\}\wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

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

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge s > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_i+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \ge \boldsymbol{n} < n \wedge \boldsymbol{l_s} + 1 \le \boldsymbol{l_i} \le D + s - \boldsymbol{n} \wedge$

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

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

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

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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

$\boldsymbol{s}\!: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}[illegible])}^{(\ )} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_i}} \sum_{j_i=\boldsymbol{l_s}+s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge s > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+\text{[illegible]}}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s\text{[illegible]}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{\text{[illegible]}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-\text{[illegible]}}^{\text{[illegible]}+j_s-\text{[illegible]}\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\text{[illegible]}-j^{sa}+1)}^{\text{[illegible]}-j^{sa}-\mathbb{k}_2)} \sum_{\text{[illegible]}j_i+1}^{\text{[illegible]}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_{\text{[illegible]}} - n_{is} - 1)!}{(j_s \text{[illegible]} 2)! \cdot (n_{\text{[illegible]}} - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n\text{[illegible]} - n_{ik} - 1)!}{(j_{ik}\text{[illegible]}) \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{\text{[illegible]}} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=\boldsymbol{l_{sa}}+s}^{\boldsymbol{l_i}}$$

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

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s}+1 \leq \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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

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

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

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

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

$\boldsymbol{s}: \left\{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z : z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1} \sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\Bbbk_2} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

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

$$
\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot
$$

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

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-\mathbb{k}_1-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge$ [illegible] 1 [illegible] $\boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}\!: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z : z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_i+j_{sa}-j_{ik})}^{(\ )} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

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

$$
\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot
$$

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

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

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

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\;)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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

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

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

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

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

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa},j_{\text{[illegible]}}} = \sum_{\text{[illegible]}=1}^{\text{[illegible]}} \sum_{(j_s=2)}^{(\text{[illegible]}+1)} \sum_{\text{[illegible]}=j_{sa}^{ik}+1}^{j^{\text{[illegible]}}_{\text{[illegible]}a}-j_{sa}\text{[illegible]}} \sum_{(j^{sa}=j_{sa}+1)}^{\text{[illegible]}} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1} $$

$$ \sum_{n_i=\boldsymbol{n}+\text{[illegible]}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\text{[illegible]}s+1)}^{(n_i-\text{[illegible]}1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

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

$$ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot $$

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

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot $$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{(\boldsymbol{l_s})}\sum_{(j_s=\cdots)}^{\cdots}\sum_{j_{ik}=j_s+1}^{\cdots}\sum_{(j^{sa}=j_{sa}+1)}^{(\cdots)}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\boldsymbol{n}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - \text{[illegible]})!} +$$

$$\sum_{k=1}^{\text{[illegible]}} \sum_{\text{[illegible]}=2)}^{\text{[illegible]}_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{\text{[illegible]}+1}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \text{[illegible]}_{sa} - s)}^{(\quad)} \sum_{j_i = s+2}^{\text{[illegible]} - 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{\text{[illegible]}} \sum_{(n_{is} = \text{[illegible]} + \mathbb{k} - j_s + 1)}^{(n_i \text{[illegible]} + 1)} \sum_{\text{[illegible]} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{\text{[illegible]} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \text{[illegible]} \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + \text{[illegible]} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=2)}^{(j_{ik}-j^{ik}_{[illegible]})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{[illegible]}}\ \sum_{(j^{sa}=j_i[illegible])}^{(\ )}\ \sum_{[illegible]s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}[illegible]\mathbb{k}-j_{[illegible]})}^{(n_i-j_s+1)}\ \sum_{[illegible]=\boldsymbol{n}+[illegible]+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}[illegible]}$$

$$\sum_{(n_{sa}[illegible]+\mathbb{k}_3-j^{s[illegible]})}^{(n_{ik}+j[illegible]j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}[illegible]-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-[illegible])!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{([illegible]_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j[illegible]j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

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

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

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

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

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

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{[illegible]} = \sum_{[illegible]} \sum_{(j_s=[illegible]-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{[illegible]} \sum_{[illegible]=j_{sa}+1)}^{[illegible])} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{[illegible]+\mathbb{k}}^{[illegible]} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s[illegible]} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$S_{j_s,j_{ik},\ldots,j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s\ [illegible])!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}\ [illegible]\ j^{sa}-s)!}\cdot$$

$$\frac{([illegible]-\boldsymbol{l_i})!}{(D+[illegible]-\boldsymbol{n}-\boldsymbol{l_i}[illegible]-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{[illegible]} \leq j^{sa} + j_{sa}^{[illegible]} [illegible] j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s$ [illegible] $^{sa} + s -$ [illegible] $\leq j_i \leq$ [illegible]

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} >$ [illegible] $\wedge \boldsymbol{l_i} + j_{sa} -$ [illegible] $\boldsymbol{l_{sa}} \wedge$

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

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} -$ [illegible] $j_{sa}^{s} = j_{sa}$ [illegible] $1 \wedge$

$\boldsymbol{s}\colon \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3,$ [illegible] $\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s +$ [illegible] $\wedge$

$\mathbb{k}_{[illegible]} : z = 3 \wedge$ [illegible] $= \mathbb{k}_1 +$ [illegible] $+ \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

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

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa} = \boldsymbol{l_{ik}} + j_{sa}^{ik} - s + 1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \land$

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

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

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

$D \geq \boldsymbol{n} < n \land I = \mathbb{k} > 0 \land$

$j_{sa} = j_{sa}^{i} - 1 \land j_{sa}^{ik} < j_{sa} - 1 \land j_{sa}^{s} = j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\right\} \land$

$s \geq 5 \land \boldsymbol{s} = s + \mathbb{k} \land$

$\mathbb{k} \land z = 3 \land \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{\left(j_s = j_{ik} - j_{sa}^{ik} + 1\right)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_{ik}} + j_{sa}^{ik} - s)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

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

$$\frac{(n_s - \boldsymbol{n} - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

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

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa} = \boldsymbol{l_{ik}} + j_{sa}^{ik} - s + 1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \Bbbk}^{n} \sum_{(n_{is} = \boldsymbol{n} + \Bbbk - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \Bbbk_2 + \Bbbk_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \Bbbk_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \Bbbk_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \Bbbk_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

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

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{(j^{sa} = j_{sa} + 2)}^{(\boldsymbol{l_{ik}} + j_{sa}^{ik} - s)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

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

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

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

$D\geq\boldsymbol{n}<n\wedge I=\Bbbk>0\wedge$

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

$\boldsymbol{s}:\left\{j_{sa}^{s},\Bbbk_1,j_{sa}^{ik},\cdots,\Bbbk_2,j_{sa},\Bbbk_3,j_i\right\}$

$s\geq5\wedge\boldsymbol{s}=s+\Bbbk\wedge$

$\Bbbk_z:z=3\wedge\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}-j_i)!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \land$

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

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

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

$D \geq \boldsymbol{n} < n \land I = \mathbb{k} > 0 \land$

$j_{sa} = j_{sa}^{i} - 1 \land j_{sa}^{ik} < j_{sa} - 1 \land j_{sa}^{s} = j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\}$

$s \geq 5 \land \boldsymbol{s} = s + \mathbb{k} \land$

$\mathbb{k}_z: z = 3 \land \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \Bbbk_3 - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

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

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 3 \wedge \boldsymbol{n} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik})}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 2)}^{(\boldsymbol{l_s} + j_{sa} - 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\mathbb{k}_3-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

$j_{sa} = j_i - 1 \wedge j_{sa}^{ik} < j_i - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 3 \wedge S = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\;)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_s} + j_{sa} - 1)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

$j_{sa} = j_s - 1 \wedge j_{sa}^{ik} < j_{ik} - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

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

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{\left(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}\right)!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - [illegible])!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \land$

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

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

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

$D \geq \boldsymbol{n} < n \land I = \mathbb{k} > 0 \land$

$j_{sa} = j_{sa}^{i} - 1 \land j_{sa}^{ik} < j_{sa} - 1 \land j_{sa}^{s} = j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\right\} \land$

$s \geq 3 \land \boldsymbol{s} = s + \mathbb{k} \land$

$\mathbb{k}_z: z = 3 \land \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{(j^{sa} = j_{sa} + 2)}^{(\boldsymbol{l_s} + j_{sa} - 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_s} \leq D - s + 1 \wedge$

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

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

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

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

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

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z\colon z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

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

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

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

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

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

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-\cdots}$$

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

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j\cdots1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge s+1 \leq \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z : z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1)}^{(n_{is}+j_s-j_{ik}-\Bbbk_1)}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

$D \geq \boldsymbol{n} < n \land I = \mathbb{k} > 0 \land$

$j_{sa} = j_{sa}^{i} - 1 \land j_{sa}^{ik} < j_{sa} - 1 \land j_{sa}^{s} = j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \land$

$s \geq 5 \land \boldsymbol{s} = s + \mathbb{k} \land$

$\mathbb{k}_z: z = 3 \land \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{\text{[illegible]}} \sum_{(j_s=j_{ik}\text{[illegible]}+1)}^{\text{[illegible]})}$$

$$\sum_{j_{ik}=\text{[illegible]}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\text{[illegible]}+j_{sa}-j_{sa}^{\text{[illegible]}})}^{(\ )} \sum_{\text{[illegible]}-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{\text{[illegible]}=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\text{[illegible]}+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+\text{[illegible]}+j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

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

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{[illegible]} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}\,[illegible]} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{[illegible]\,sa)} \sum_{j_i=j^{sa}+s-j_{sa}} $$

$$ \sum_{n_i=\boldsymbol{n}+\Bbbk}^{[illegible]} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3} $$

$$ \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot $$

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

$$ \frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot $$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

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

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

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

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

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

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\right\}$

$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z: z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{\left(j_s=j_{ik}-j_{sa}^{ik}+1\right)}^{(\;)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(n-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

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

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

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

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

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

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \mathbf{n} - \boldsymbol{l_i})! \cdot (\mathbf{n} - j_i)!}$$

$D \geq \mathbf{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \mathbf{n} \wedge$

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

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

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

$D \geq \mathbf{n} < n \wedge I = \Bbbk > 0 \wedge$

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

$\mathbf{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \mathbf{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\;\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\;\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}\;\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\;\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-\Bbbk_3-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \wedge$

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

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

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

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

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

$\boldsymbol{s}: \left\{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$ {}_{fz}S_{j_s\;,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\;)} \sum_{j_i=j^{sa}+s-\cdots} $$

$$ \sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2\cdots-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j\cdots 1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2\cdots} \sum_{n_s=\boldsymbol{n}-j_i+\cdots}^{\cdots+j^{s\cdots}\cdots j_i-\Bbbk_3} $$

$$ \frac{(\cdots - n_{is}\cdots 1)!}{(j_s\cdots 2)! \cdot (n_i \cdots j_s+1)!} \cdot $$

$$ \frac{(n_{is}\cdots_{ik}-1)!}{(j_{ik}-j_s\cdots 1)! \cdot (n_{is}\cdots j_s - n_{ik} - j_{ik})!} \cdot $$

$$ \frac{(n_{ik}-n_{s}\cdots - \Bbbk_2 - 1)!}{(\cdots - j_{ik}\cdots 1)! \cdot (n_{i}\cdots j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot $$

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

$$ \frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)! \cdot (j_s-2)!} \cdot $$

$$ \frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})! \cdot \left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!} \cdot $$

$$ \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!} + $$

$$ \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})} $$

$$ \sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\;)} \sum_{j_i=j^{sa}+s-j_{sa}} $$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\Bbbk_3-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 0 \wedge \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \wedge$

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

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

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

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

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

$\boldsymbol{s}: \left\{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j_i+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \ge \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \le D + s - \boldsymbol{n} \wedge$

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

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

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

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \land j_{sa}^{ik} < j_{sa} - 1 \land j_{sa}^{s} = j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \land$

$s \geq 5 \land \boldsymbol{s} = s + \mathbb{k} \land$

$\mathbb{k}_z: z = 3 \land \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}\text{[illegible]})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}\text{[illegible]})}^{(\ )} \sum_{j_i=j^{sa}+s-j_s\text{[illegible]}}^{\text{[illegible]}}$$

$$\sum_{n_i=\boldsymbol{n}\text{[illegible]}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\text{[illegible]}+1)}^{(\text{[illegible]}+1)} \sum_{n_{ik}=\boldsymbol{n}+\text{[illegible]}-j_{ik}+1}^{\text{[illegible]}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}\text{[illegible]}_3-j^{sa}+1)}^{(\text{[illegible]}+j_{ik}-j\text{[illegible]}\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i\text{[illegible]}^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s\text{[illegible]})}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2\text{[illegible]}+1}^{n_{is}+j_s-\text{[illegible]}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}\text{[illegible]}+\mathbb{k}_3-j\text{[illegible]})}^{(n_{ik}+j_{ik}-j^{sa}\text{[illegible]})}\sum_{n\text{[illegible]}-j_i+1}^{n_{sa}+j^{sa}-j_i-\text{[illegible]}}$$

$$\frac{\text{[illegible]}-n_{is}-1)!}{\text{[illegible]}-2)!\cdot\text{[illegible]}-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n\text{[illegible]}-n_{ik}-1)!}{\text{[illegible]}-j_s-1\text{[illegible]}(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}\text{[illegible]}n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j\text{[illegible]}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \le D + s - \boldsymbol{n} \wedge$

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

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

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

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

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

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{\text{[illegible]}} \sum_{\text{[illegible]}=2)}^{\text{[illegible]}_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{\text{[illegible]}+j_{sa}-j_{sa}^{ik}+\text{[illegible]}}^{(\boldsymbol{l}\text{[illegible]}} \sum_{\text{[illegible]}=j^{sa}+s-j_{sa}}^{\text{[illegible]}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n\text{[illegible]}} \sum_{(n_{is}\text{[illegible]}+\Bbbk-j_s+1)}^{(n_i-\text{[illegible]}1)} \sum_{\text{[illegible]}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{\text{[illegible]}-\Bbbk_1}$$

$$\sum_{(n_{sa}\text{[illegible]}\Bbbk_3-j^{sa}+1)}^{(n_{ik}+\text{[illegible]}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2\ldots)}^{(\boldsymbol{l_s})} [illegible]$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}\ldots)}^{(\boldsymbol{l_{sa}})} \sum_{\ldots j^{sa}\ldots-j_{sa}} [illegible]$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\ldots+\mathbb{k}\ldots)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}\ldots+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}\ldots} [illegible]$$

$$\sum_{(n_{s}\ldots\boldsymbol{n}+\mathbb{k}_3-j^{s}\ldots)}^{(n_{ik}+\ldots j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}\ldots j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\;)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

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

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$(D \geq \ldots n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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

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

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

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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

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

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

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

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$fz\text{[illegible]}{}_{j_{ik}, j^{sa}, j_i\text{[illegible]}} = \sum_{\text{[illegible]}k=1}^{\text{[illegible]}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{\text{[illegible]}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}\text{[illegible]}j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{\text{[illegible]}a)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{\text{[illegible]}=\boldsymbol{n}+\Bbbk}^{\text{[illegible]}} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\text{[illegible]}\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\text{[illegible]}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}\text{[illegible]})!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})\text{[illegible]}(j_i+j_{sa}-\text{[illegible]}-s)!}\cdot$$

$$\frac{(D\text{[illegible]}\boldsymbol{l_i})!}{\text{[illegible]}+j\text{[illegible]}\boldsymbol{n}-\boldsymbol{l_i}\text{[illegible]}(\boldsymbol{n}-j_i)!}+$$

$$\text{[illegible]}\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\text{[illegible]}}^{\boldsymbol{l_{ik}}}\ \sum_{\text{[illegible]}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\text{[illegible]}\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{\text{[illegible]}\boldsymbol{n}+\Bbbk}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{\text{[illegible]}}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)\text{[illegible]}}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-\text{[illegible]}^{sa}-s)!}\cdot$$

$$\frac{(D\ \text{[illegible]})!}{(D+j_i\ \text{[illegible]}\ \boldsymbol{n}-\boldsymbol{l_i})!\cdot(\text{[illegible]}\ j_i)!}+$$

$$\sum_{\text{[illegible]}}^{\text{[illegible]}}\ \sum_{\text{[illegible]}=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{\text{[illegible]}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{i\text{[illegible]}}\ j_{sa}-j_{sa}^{ik})}^{(\text{[illegible]})}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i\text{[illegible]}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j\text{[illegible]})}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-\text{[illegible]})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})\text{[illegible]}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\text{[illegible]}\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{\text{[illegible]}}\;\sum_{(j_s=\text{[illegible]}}^{(\text{[illegible]}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=\text{[illegible]}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-\text{[illegible]}}\;\sum_{(j^{sa}=\text{[illegible]}j_{sa}-j_{sa}^{ik})}^{\text{[illegible]}}\;\sum_{j_i=\text{[illegible]}+s-j_{sa}}^{\text{[illegible]}}$$

$$\sum_{n_i=\text{[illegible]}\mathbb{k}}^{\boldsymbol{n}}\;\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-\text{[illegible]}+1)}^{(\text{[illegible]}+1)}\;\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\text{[illegible]}_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(\text{[illegible]}_{ik}-j^{sa}-\mathbb{k}_2)}\;\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$S \text{[illegible]}{}_{ik, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{sa}} - j_{sa} + 1)}$$

$$\sum_{\text{[illegible]} j_s + j_{sa}^{ik} - 1} \sum_{\left(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

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

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

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

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

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

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \land$

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

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

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

$D \geq \boldsymbol{n} < n \land I = \Bbbk > 0 \land$

$j_{sa} = j_{sa}^{i} - 1 \land j_{sa}^{ik} < j_{sa}^{i} - 1 \land j_{sa} = j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \land$

$s \geq 5 \land \boldsymbol{s} = s + \Bbbk \land$

$\Bbbk_z: z = 3 \land \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-\mathbb{k}_1-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-\mathbb{k}_3-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 0 \wedge \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

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

$$
\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot
$$

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

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

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

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

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

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge s>1\wedge j_i\leq D+s-\boldsymbol{n}\wedge$

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

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

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

$D\geq\boldsymbol{n}<n\wedge I\ =\ \Bbbk\ >\ 0\wedge$

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

$\boldsymbol{s}:\left\{j_{sa}^{s},\Bbbk_1,j_{sa}^{ik},\cdots,\Bbbk_2,j_{sa},\Bbbk_3,j_{sa}^{i}\right\}\wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

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

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k} \sum_{(j_s=2)}^{(\boldsymbol{l_s})} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1} \sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})} \sum_{j_{ik}=j_s+j_{sa}^{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\land\boldsymbol{l_s}>1\land\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\land$

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

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

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\land\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}\geq\boldsymbol{l_{ik}}\land\boldsymbol{l_i}+j_{sa}-s\geq\boldsymbol{l_{sa}}\land$

$D\geq\boldsymbol{n}<n\land I=\Bbbk>0\land$

$j_{sa}=j_{sa}^{i}-1\land j_{sa}^{ik}<j_{sa}-1\land j_{sa}^{s}=j_{sa}^{ik}-1\land$

$\boldsymbol{s}:\left\{j_{sa}^{s},\Bbbk_1,j_{sa}^{ik},\cdots,\Bbbk_2,j_{sa},\Bbbk_3,j_{sa}^{i}\right\}$

$s\geq5\land\boldsymbol{s}=s+\Bbbk\land$

$\Bbbk_z:z=3\land\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

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

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

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

$D\geq\boldsymbol{n}<n\wedge I=\Bbbk>0\wedge$

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

$\boldsymbol{s}:\{j_{sa}^{s},\Bbbk_1,j_{sa}^{ik},\cdots,\Bbbk_2,j_{sa},\Bbbk_3,j_{sa}^{i}\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\Bbbk\wedge$

$\Bbbk_z:z=3\wedge\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3\Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}=j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_s=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbb{k}_2+\mathbb{k}_3+\boldsymbol{n}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbb{k}_3+\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)! \cdot (j_s-2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})! \cdot \left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})! \cdot \left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!} +$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{i\text{[illegible]}}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s\text{[illegible]}-j_i+1}^{n_{sa}+j^{sa}-j_i-\text{[illegible]}}$$

$$\frac{(n_i\ \text{[illegible]}-1)!}{(j_s-2\text{[illegible]}(n_i-n_{is}\ \text{[illegible]}+1)!}\cdot$$

$$\frac{(n_{is}-n_{i\text{[illegible]}}-1)!}{(j_{ik}-j\text{[illegible]}(n_{is}+j\text{[illegible]}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{\text{[illegible]}}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1\text{[illegible]}(n_{ik}+j\text{[illegible]}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(\text{[illegible]}_{sa}-n_s\text{[illegible]}1)!}{(j_i-j^{sa}-1\text{[illegible]}(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

D [illegible] $\boldsymbol{n}$ [illegible] $\wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j$[illegible]$- j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

j_{ik} [illegible] $j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z\colon z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+\cdots)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s-1)} \sum_{(j^{sa}=\cdots+1)}^{\cdots} \sum_{j_i=s+2}^{\cdots+j_{sa}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\cdots+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\cdots+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-\cdots+1)}^{(n_{ik}+\cdots-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{\cdots-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=\boldsymbol{l_{sa}}+j_{sa}-s+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa})}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=\text{[illegible]}-j_{sa}^{ik}+1)}^{(\ \text{[illegible]}\ )} $$

$$ \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(\text{[illegible]}=j_{sa}+1)}^{(j_{\text{[illegible]}}-s-1)} \sum_{j_i=\text{[illegible]}}^{\boldsymbol{l}_{\text{[illegible]}}\ j_{sa}^{ik}-s} $$

$$ \sum_{n_i=\boldsymbol{n}\text{[illegible]}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\text{[illegible]}+1)}^{(\text{[illegible]}+1)} \sum_{n_{ik}=\boldsymbol{n}+\text{[illegible]}-j_{ik}+1}^{\text{[illegible]}+j_s-j_{ik}-\mathbb{k}_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}\text{[illegible]}_3-j^{sa}+1)}^{(\text{[illegible]}_{k}+j_{ik}-j\text{[illegible]}\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - 1)!}{(\text{[illegible]}_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot $$

$$ \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot $$

$$ \frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} + $$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i} \right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-s)}^{()} \sum_{j_i=s}^{\boldsymbol{l}_i+j_{sa}^{ik}-s} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot $$

$$ \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot $$

$$ \frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} + $$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i} \right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=[illegible]-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{([illegible]=j_{sa}+1)}^{(j_i[illegible]-s-1)} \sum_{j_i=[illegible]}^{\boldsymbol{l}_{[illegible]}j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}[illegible]}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}[illegible]+1)}^{[illegible]+1)} \sum_{n_{ik}=\boldsymbol{n}[illegible]-j_{ik}+1}^{[illegible]+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}[illegible]_3-j^{sa}+1)}^{[illegible]_k+j_{ik}-j[illegible]\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=\text{[illegible]}-j_{sa}^{ik}-s+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s\text{[illegible]})}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\text{[illegible]}+1}^{n_{is}+j_s-\text{[illegible]}-\Bbbk_1}$$

$$\sum_{(n_{sa}\text{[illegible]}+\Bbbk_3-j^{s}\text{[illegible]})}^{(n_{ik}+j_{ik}-j^{sa}-\text{[illegible]})}\ \sum_{n\text{[illegible]}-j_i+1}^{n_{sa}+j^{sa}-j_i-\text{[illegible]}}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s+\ldots}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2\ldots-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-\ldots)}^{(n_{ik}+j_{ik}-j^{sa}-\ldots)} \sum_{n_s=\boldsymbol{n}-j_i+\ldots}^{\ldots+j^{s\ldots}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

[illegible] $> \boldsymbol{n}$ [illegible] $\wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{[illegible]=1} \sum_{(j_s = j_{i[illegible]} j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}[illegible]^{ik}-j_{sa}} \sum_{(j^{[illegible]}a+1)}^{(j_i+j_{sa}-s-[illegible])} \sum_{j_i=s+2}^{[illegible]s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n[illegible]} \sum_{(n_{is}[illegible]+\Bbbk-j_s+1[illegible])}^{(n_i[illegible]+1)} \sum_{[illegible]_k=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{[illegible]-\Bbbk_1}$$

$$\sum_{(n_{sa}=[illegible]\Bbbk_3-j^{sa}+1)}^{(n_{ik}[illegible]-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)}\sum_{j_i=\boldsymbol{l_s}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa})}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i} \right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=\ldots-j_{sa}^{ik}+1)}^{(\ )}
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\ldots}^{\ldots+s-1}
\sum_{n_i=\boldsymbol{n}\ldots}^{n} \sum_{(n_{is}=\boldsymbol{n}+\ldots+1)}^{(\ldots+1)} \sum_{n_{ik}=\boldsymbol{n}+\ldots-j_{ik}+1}^{\ldots+j_s-j_{ik}-\mathbb{k}_1}
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(\ldots+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I \;=\; \mathbb{k} \;>\; 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}\colon \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z\colon z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)}^{\text{[illegible]}}
$$

$$
\sum_{j_{ik}=\text{[illegible]}\,j_{sa}}^{\text{[illegible]}} \sum_{(j^{sa}=\text{[illegible]}\,j_{sa}-s)}^{(\text{[illegible]})} \sum_{j_i=s+2}^{\text{[illegible]}-1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\text{[illegible]}} \sum_{(n_{is}=\text{[illegible]}+\mathbb{k}-j_s+1)}^{(n_i\,\text{[illegible]}+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\text{[illegible]}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\text{[illegible]}\,\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}\,\text{[illegible]}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s = \text{[illegible]} - j_{sa}^{ik}+1)}^{(\ \ )} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}+\text{[illegible]}}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\text{[illegible]}+j_{sa}-s-1)} \sum_{j_i=\text{[illegible]}2}^{\text{[illegible]}+s-1} $$

$$ \sum_{n_i=\boldsymbol{n}\text{[illegible]}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\text{[illegible]}+1)}^{\text{[illegible]}j_i+1)} \sum_{n_{ik}=\boldsymbol{n}\text{[illegible]}-j_{ik}+1}^{\text{[illegible]}+j_s-j_{ik}-\mathbb{k}_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}\text{[illegible]}_3-j^{sa}+1)}^{\text{[illegible]}_{k}+j_{ik}-\text{[illegible]}\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot $$

$$ \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot $$

$$ \frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot $$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{sa}\text{[illegible]})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}\text{[illegible]}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s\text{[illegible]})}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3\text{[illegible]}+1}^{n_{is}+j_s-\text{[illegible]}-\Bbbk_1}$$

$$\sum_{(n_{sa}\text{[illegible]}\Bbbk_3-j^{sa}\text{[illegible]})}^{(n_{ik}+j_{ik}-j^{sa}-\text{[illegible]})}\ \sum_{\text{[illegible]}j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk\text{[illegible]}}$$

$$\frac{(\text{[illegible]}-n_{is}-1)!}{(j\text{[illegible]}-2)!\cdot(\text{[illegible]}-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n\text{[illegible]}-n_{ik}-1)!}{(\text{[illegible]}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j\text{[illegible]}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(\text{[illegible]}j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=s}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{\text{[illegible]}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j_s+j_{sa}^{ik}-j_{sa}}^{j^{sa}-j_{sa}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\text{[illegible]}s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=s\ldots}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa})}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}\colon \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i} \right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z\colon z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik} \cdots)}
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdots)} \sum_{j_i=\cdots}^{\cdots+s-1}
\sum_{n_i=\boldsymbol{n}+\cdots}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\cdots+1)}^{(\cdots+1)} \sum_{n_{ik}=\boldsymbol{n}+\cdots-j_{ik}+1}^{\cdots+j_s-j_{ik}-\mathbb{k}_1}
\sum_{(n_{sa}=\boldsymbol{n}\cdots_3-j^{sa}+1)}^{(\cdots_{ik}+j_{ik}-j\cdots\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=\boldsymbol{l_s}+s}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=s}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$f_Z([illegible], j_{ik}, j^{sa}, j_{[illegible]}) = \sum_{[illegible]k=1}^{[illegible]} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_s^{[illegible]}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{[illegible]=\boldsymbol{n}+\mathbb{k}}^{[illegible]} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + \text{[illegible]})!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - \text{[illegible]} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} \text{[illegible]})!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - \text{[illegible]} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(\text{[illegible]} + j_i \text{[illegible]} \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{\text{[illegible]}} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{\text{[illegible]}=j_{sa}^{ik}+1}^{\text{[illegible]}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{\text{[illegible]}\boldsymbol{n}+\Bbbk}^{\text{[illegible]}} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}-j_{sa}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_{\text{[illegible]}})!}$$

$$\sum_{k=1}^{\text{[illegible]}} \sum_{(\text{[illegible]}_s=2)}^{\left(j_{ik}-j_{sa}^{ik}\right)}$$

$$\sum_{j_{ik}=\text{[illegible]}-j_{sa}}^{\text{[illegible]}} \sum_{(j^{sa}=j_{\text{[illegible]}}-j_{sa}-s)}^{(\ \text{[illegible]}\ )} \sum_{j_i=s+2}^{\text{[illegible]}-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n\text{[illegible]}} \sum_{(n_{is}\text{[illegible]}+\mathbb{k}-j_s+1)}^{(n_i-\text{[illegible]}1)} \sum_{\text{[illegible]}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\text{[illegible]}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\text{[illegible]}\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+\text{[illegible]}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s,[illegible]^{sa},j_i} = \sum_{k=1}^{[illegible]} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_i[illegible]^{sa}+j_{sa}^{ik}-j_{sa}}^{[illegible]} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{[illegible]} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s \geq \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I \ = \ \Bbbk \ > \ 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{i} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\}$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_{ik}} + j_{sa}^{ik} - s)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \Bbbk}^{n} \sum_{(n_{is} = \boldsymbol{n} + \Bbbk - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \Bbbk_2 + \Bbbk_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \Bbbk_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \Bbbk_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \Bbbk_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_s}-s)!}{(j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}-j_i)!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\land\boldsymbol{l_s}>1\land\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\land$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\land j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\land$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\land j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\land$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\land\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\land\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\land$

$D\geq\boldsymbol{n}<n\land I=\Bbbk>0\land$

$j_{sa}^{s}<j_{sa}^{i}-1\land j_{sa}^{ik}=j_{sa}-1\land j_{sa}^{s}=j_{sa}^{ik}-1\land$

$\boldsymbol{s}:\{j_{sa}^{s},\Bbbk_1,j_{sa}^{ik},\Bbbk_2,j_{sa},\cdots,\Bbbk_3,j_{sa}^{i}\}$

$s\geq5\land S=s+\Bbbk\land$

$\Bbbk_z:z=3\land\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3\Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{\left(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1\right)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}-\boldsymbol{l_{ik}}-j_{sa}^{ik})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\Bbbk>0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}^{i}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\Bbbk_1,j_{sa}^{ik},\Bbbk_2,j_{sa},\cdots,\Bbbk_3,j_{sa}^{i}\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=s+\Bbbk\wedge$

$\Bbbk_z:z=3\wedge\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3\Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - \text{[illegible]})!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s \text{ [illegible] } j_i - \Bbbk_3)!} \cdot$$

$$\frac{\text{[illegible]} - 1)!}{(n_s + \text{[illegible]} - \boldsymbol{n} - 1\text{[illegible]} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} \text{ [illegible]})! \cdot (j_s - 2)!} \cdot$$

$$\frac{\text{[illegible]}\boldsymbol{l_{sa}} + j_{sa} \text{ [illegible] } \boldsymbol{l_{ik}} - j_{sa}\text{[illegible]}}{(j_{ik} + \boldsymbol{l_{sa}} - j^{\text{[illegible]}} \boldsymbol{l_{ik}})! \cdot (\text{[illegible]} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\text{[illegible]} - \boldsymbol{l_i})!}{(D \text{ [illegible] } j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq$ [illegible] $+ s - \boldsymbol{n}$ [illegible]

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s +$ [illegible] $- 1 \leq j_{ik} \leq$ [illegible]$^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq$ [illegible]$^{sa} \leq j_i + j_{sa} -$ [illegible] $\land j^{sa} + s$ [illegible] $j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}} - j_{sa}^{\text{[illegible]}} +$ [illegible] $= \boldsymbol{l_s} \land \boldsymbol{l}$[illegible] $+ j_{sa}^{ik} - j_{sa} = \boldsymbol{l}$[illegible] $\boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n \land I$ [illegible] $\Bbbk > 0$ [illegible]

$j_{sa} <$ [illegible] $- 1 \land j_{sa}^{ik} =$ [illegible] $- 1 \land$ [illegible]$_{sa} = j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j$[illegible]$, \Bbbk_2, j_{sa}, \cdots$ [illegible] $\Bbbk_3, j_{sa}^{i}\} \land$

$s \geq$ [illegible] $= s + \Bbbk \land$

$\Bbbk_z: z = 3 \land$ [illegible] $= \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_s} + j_{sa} - 1)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa}^{i} = j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-\Bbbk_1-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\mathbf{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\mathbf{l_s}-2)!}{(\mathbf{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\mathbf{l_{ik}}-\mathbf{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\mathbf{l_{ik}}-j_{ik}-\mathbf{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\mathbf{l_i})!}{(D+j_i-\mathbf{n}-\mathbf{l_i})!\cdot(\mathbf{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\mathbf{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\mathbf{l_s}+j_{sa})}^{(\mathbf{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\mathbf{n}-\boldsymbol{l_i})!\cdot(\mathbf{n}-j_i)!}$$

$D \geq \mathbf{n} < n \wedge \boldsymbol{l_s} > 0 \wedge \boldsymbol{l_i} \leq D + j_i - \mathbf{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{i} < j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}} $$

$$ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} $$

$$ \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot $$

$$ \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot $$

$$ \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot $$

$$ \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot $$

$$ \frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot $$

$$ \frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot $$

$$ \frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot $$

$$ \frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot $$

$$ \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+ $$

$$ \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} $$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{i} < j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\land\boldsymbol{l_s}>0\land\boldsymbol{l_i}\leq D+j_i-\boldsymbol{n}\land$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\land j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\land$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\land j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\land$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\land\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\land\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\land$

$D\geq\boldsymbol{n}<n\land I\ =\ \Bbbk\ >\ 0\land$

$j_{sa}^{i}=j_{sa}-1\land j_{sa}^{ik}=j_{sa}-1\land j_{sa}^{s}=j_{sa}^{ik}-1\land$

$\boldsymbol{s}:\left\{j_{sa}^{s},\Bbbk_1,j_{sa}^{ik},\Bbbk_2,j_{sa},\cdots,\Bbbk_3,j_{sa}^{i}\right\}\land$

$s\geq5\land\boldsymbol{s}=s+\Bbbk\land$

$\Bbbk_z:z=3\land\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3\Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\mathbf{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot
$$

$$
\frac{(\mathbf{l_s} - 2)!}{(\mathbf{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\mathbf{l_{ik}} - \mathbf{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \mathbf{l_{ik}} - j_{ik} - \mathbf{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\mathbf{l_{sa}} + j_{sa}^{ik} - \mathbf{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \mathbf{l_{sa}} - j^{sa} - \mathbf{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \mathbf{l_i})!}{(D + j_i - \mathbf{n} - \mathbf{l_i})! \cdot (\mathbf{n} - j_i)!} +
$$

$$
\sum_{k=1} \sum_{(j_s=2)}^{(\mathbf{l_s})}
$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\big((D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \land$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \land \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \land \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \lor$

$(D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \land$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \land$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \land$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\cdots} \sum_{(\cdots=2)}^{(\cdots_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=\cdots}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s} \cdots -1)} \sum_{\cdots j^{sa} + s - j_{sa} + 1}^{\cdots}$$

$$\sum_{n_i = \boldsymbol{n} + \Bbbk}^{\cdots} \sum_{(n_{is} = \cdots + \Bbbk - j_s + 1)}^{(n_i - \cdots 1)} \sum_{\cdots = \boldsymbol{n} + \Bbbk_2 + \Bbbk_3 - j_{ik} + 1}^{\cdots - \Bbbk_1}$$

$$\sum_{(n_{sa} = \cdots \Bbbk_3 - j^{sa} + 1)}^{(n_{ik} + \cdots - j^{sa} - \Bbbk_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k\text{[illegible]}} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}\text{[illegible]}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_s}+\text{[illegible]})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\text{[illegible]}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{\text{[illegible]}}=\boldsymbol{n}+\mathbb{k}-j_s+\text{[illegible]})}^{(n_{\text{[illegible]}}+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\text{[illegible]}+j_{\text{[illegible]}}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}\text{[illegible]}_3-j^{sa}+1)}^{(n_{ik}\text{[illegible]}_k-j^{sa}-\mathbb{k}_2\text{[illegible]})} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+\text{[illegible]})}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_{sa}^{\text{[illegible]}}=\text{[illegible]}-j_{sa}}^{\text{[illegible]}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\text{[illegible]}+\Bbbk\text{[illegible]})}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}\text{[illegible]}+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\text{[illegible]}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{\text{[illegible]}})}^{(n_{ik}+\text{[illegible]}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}\text{[illegible]}+j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}\ \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa})}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j^{i}_{sa} - 1 \wedge j^{ik}_{sa} = j_{sa} - 1 \wedge j^{s}_{sa} = j^{ik}_{sa} - 1 \wedge$

$\boldsymbol{s}: \{j^{s}_{sa}, \mathbb{k}_1, j^{ik}_{sa}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j^{i}_{sa}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\;,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=[illegible]-j^{ik}_{sa}+1)}^{(\;)}$$

$$\sum_{j_{ik}=j^{ik}_{sa}+1}^{\boldsymbol{l_{sa}}+j^{ik}_{sa}-j_{sa}} \sum_{(j^{sa}=j_{ik}+j_{sa}[illegible])}^{(\;)} \sum_{j_i=j^{sa}+s-[illegible]}^{[illegible]}$$

$$\sum_{n_i=\boldsymbol{n}[illegible]}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}[illegible]+1)}^{([illegible]+1)} \sum_{n_{ik}=\boldsymbol{n}+[illegible]-j_{ik}+1}^{[illegible]+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}[illegible]_3-j^{sa}+1)}^{([illegible]+j_{ik}-j[illegible]\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \land \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \land \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n \land I = \Bbbk > 0 \land$

$j_{sa} < j_{sa}^{i} - 1 \land j_{sa}^{ik} = j_{sa} - 1 \land j_{sa}^{s} = j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \land$

$s \geq 5 \land \boldsymbol{s} = s + \Bbbk \land$

$\Bbbk_z : z = 3 \land \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, \ldots} = \sum \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\;)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\;)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$$S_{j_s,j_{ik},\ldots,j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I \ = \ \mathbb{k} \ > \ 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}\colon z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{\left(j_s=j_{ik}-j_{sa}^{ik}+1\right)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - \ldots)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s \ldots j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{\ldots - 1)!}{(n_s + \ldots - \boldsymbol{n} - 1\ldots(\ldots - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} \ldots)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa} \ldots \boldsymbol{l_{ik}} - j_{sa} \ldots}{(j_{ik} + \boldsymbol{l_{sa}} - j^{\ldots} \ldots \boldsymbol{l_{ik}})! \cdot (\ldots + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} \ldots - \boldsymbol{l_{sa}} \ldots s)!}{(\ldots + \boldsymbol{l_i} - j_i - \boldsymbol{l_s}\ldots)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\text{[illegible]})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \land$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \land \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \land \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n \land I = \Bbbk > 0 \land$ [illegible]

$j_{sa} < j_{sa}^{i} - 1 \land j_{sa}^{ik} = j_{sa} - 1 \land j_{sa}^{s} = j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdot, \Bbbk_3, j_{sa}^{i}\right\} \land$

$s \geq 5 \land \boldsymbol{s} = s + \Bbbk \land$

$\Bbbk_z: z = 3 \land \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_s} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa}^{i} = j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$S^{\Bbbk} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} + 1 \leq \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l}_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l}_s - 2)!}{(\boldsymbol{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l}_{ik} - \boldsymbol{l}_s - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l}_{ik} - j_{ik} - \boldsymbol{l}_s)! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l}_i)!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l}_i)! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l}_s)}$$

$$\sum_{j_{ik}=\mathbf{l_s}+j_{sa}^{ik}}^{\mathbf{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\Bbbk}^{n} \sum_{(n_{is}=\mathbf{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\mathbf{l_s}-2)!}{(\mathbf{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\mathbf{l_{ik}}-\mathbf{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\mathbf{l_{ik}}-j_{ik}-\mathbf{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\mathbf{l_i})!}{(D+j_i-\mathbf{n}-\mathbf{l_i})!\cdot(\mathbf{n}-j_i)!}$$

$D \geq \mathbf{n} < n \wedge 1 \leq j_i \leq D+s-\mathbf{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \mathbf{n} \wedge$

$\mathbf{l_{ik}}-j_{sa}^{ik}+1=\mathbf{l_s} \wedge \mathbf{l_{sa}}+j_{sa}^{ik}-j_{sa} > \mathbf{l_{ik}} \wedge \mathbf{l_i}+j_{sa}-s > \mathbf{l_{sa}} \wedge$

$D \geq \mathbf{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\mathbf{s}: \left\{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\;\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\;\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\;\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\;\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\;\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\;\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=\text{[illegible]})}^{(j_{\text{[illegible]}} - j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\text{[illegible]}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=\text{[illegible]} j_{sa}-j_{sa}^{ik})}^{(\;)} \sum_{\text{[illegible]} j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{\text{[illegible]}\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\text{[illegible]}+1)}^{(\text{[illegible]}_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+\text{[illegible]}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=\text{[illegible]})}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}\text{[illegible]})}^{(\ )} \sum_{j_i=j^{s\text{[illegible]}}-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}\text{[illegible]}+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\text{[illegible]}+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}\text{[illegible]}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j\text{[illegible]}1)}^{(n_{ik}+\text{[illegible]}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{\text{[illegible]}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{[illegible]=2)}^{[illegible]_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{[illegible]j_{sa}-j_{sa}^{ik}+[illegible]}^{(\boldsymbol{l}[illegible]} \sum_{[illegible]=j^{sa}+s-j_{sa}}^{[illegible]}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n[illegible]} \sum_{(n_{is}[illegible]+\mathbb{k}-j_s+1)}^{(n_i-[illegible]1)} \sum_{[illegible]=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{[illegible]-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=[illegible]\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+[illegible]-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+\dots-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_2}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-\ldots}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2\ldots-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-\ldots 1)}^{(n_{ik}+j_{ik}-j^{sa}-\ldots} \sum_{n_s=\boldsymbol{n}-j_i+\ldots}^{\ldots+j^{s\ldots}\ldots j_i-\mathbb{k}_3}$$

$$\frac{(\ldots-n_{is}\ldots 1)!}{(j_s\ldots 2)!\cdot(n_i\ldots j_s+1)!}\cdot$$

$$\frac{(n_{is}\ldots_{ik}-1)!}{(j_{ik}-j_s\ldots 1)!\cdot(n_{is}\ldots j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}\ldots n_{sa}-1)!}{(j^{sa}\ldots_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-\ldots^{a}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$(D > \ldots n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$f_Z(\text{[illegible]}, j_{ik}, j^{sa}, j_{\text{[illegible]}}) = \sum_{\text{[illegible]}k=1}^{\text{[illegible]}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{\text{[illegible]}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}\text{[illegible]}j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{\text{[illegible]}a)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{\text{[illegible]}i=\boldsymbol{n}+\mathbb{k}}^{\text{[illegible]}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\text{[illegible]}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)\text{[illegible]}}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-\text{[illegible]}^{sa}-s)!}\cdot$$

$$\frac{(D\text{[illegible]})!}{(D+j_i\text{[illegible]}\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\text{[illegible]}j_i)!}+$$

$$\text{[illegible]}\sum_{\text{[illegible]}=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{\text{[illegible]}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_i\text{[illegible]}j_{sa}-j_{sa}^{ik})}^{(\text{[illegible]})}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i\text{[illegible]}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j\text{[illegible]})}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-\text{[illegible]})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}\sum_{(j_s=\text{[illegible]})}^{(\text{[illegible]}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=\text{[illegible]}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-\text{[illegible]}}\sum_{(j^{sa}=\text{[illegible]}j_{sa}-j_{sa}^{ik})}^{(\text{[illegible]})}\sum_{j_i=\text{[illegible]}+s-j_{sa}}$$

$$\sum_{n_i=\text{[illegible]}\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\text{[illegible]}+1)}^{(\text{[illegible]}+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(\text{[illegible]}_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I\ =\ \mathbb{k}\ >\ 0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z: z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$$S\ldots_{ik},_{j^{sa}},_{j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_{sa}}-j_{sa}+1)}$$

$$\sum_{\ldots j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{l_i}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_i\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + 1 \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{ik}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_s} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa}^{s} - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 0 \wedge \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)} $$

$$ \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}} $$

$$ \sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3} $$

$$ \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot $$

$$ \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot $$

$$ \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot $$

$$ \frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot $$

$$ \frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot $$

$$ \frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot $$

$$ \frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot $$

$$ \frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot $$

$$ \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+ $$

$$ \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)} $$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\;\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\;)}\;\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\mathbf{l_i}}$$

$$\sum_{n_i=\mathbf{n}+\Bbbk}^{n}\;\sum_{(n_{is}=\mathbf{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\;\sum_{n_{ik}=\mathbf{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\;\sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\mathbf{l_s}-2)!}{(\mathbf{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\mathbf{l_i}+j_{sa}-\mathbf{l_{sa}}-s)!}{(j^{sa}+\mathbf{l_i}-j_i-\mathbf{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\mathbf{l_i})!}{(D+j_i-\mathbf{n}-\mathbf{l_i})!\cdot(\mathbf{n}-j_i)!}$$

$D\geq\mathbf{n}<n\wedge s>1\wedge \mathbf{l_i}\leq D+s-\mathbf{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\mathbf{n}\wedge$

$\mathbf{l_{ik}}-j_{sa}^{ik}+1=\mathbf{l_s}\wedge\mathbf{l_{sa}}+j_{sa}^{ik}-j_{sa}=\mathbf{l_{ik}}\wedge\mathbf{l_i}+j_{sa}-s>\mathbf{l_{sa}}\wedge$

$D\geq\mathbf{n}<n\wedge I\;=\;\Bbbk\;>\;0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\{j_{sa}^{s},\Bbbk_1,j_{sa}^{ik},\Bbbk_2,j_{sa},\cdots,\Bbbk_3,j_{sa}^{i}\}\wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z : z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\Bbbk_2} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

[illegible] $S_{j_s,j_{ik},j}$ [illegible] $_{j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$

[illegible] $\sum_{\ldots=j_s+j_{sa}^{ik}}$ [illegible] $\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}$

$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}$ [illegible] $\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l_s} - 2)!}{(\mathbf{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\mathbf{l_{ik}} - \mathbf{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \mathbf{l_{ik}} - j_{ik} - \mathbf{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \mathbf{l_i})!}{(D + j_i - \mathbf{n} - \mathbf{l_i})! \cdot (\mathbf{n} - j_i)!}$$

$D \geq \mathbf{n} < n \land \mathbf{l_s} > 1 \land \mathbf{l_i} \leq D + s - \mathbf{n} \land$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \land$

$\mathbf{l_{ik}} - j_{sa}^{ik} + 1 = \mathbf{l_s} \land \mathbf{l_{sa}} + j_{sa}^{ik} - j_{sa} > \mathbf{l_{ik}} \land \mathbf{l_i} + j_{sa} - s > \mathbf{l_{sa}} \land$

$D \geq \mathbf{n} < n \land I = \mathbb{k} > 0 \land$

$j_{sa} < j_{sa}^{i} - 1 \land j_{sa}^{ik} = j_{sa} - 1 \land j_{sa}^{s} = j_{sa}^{ik} - 1 \land$

$\mathbf{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\}$

$s \geq 5 \land \mathbf{s} = s + \mathbb{k} \land$

$\mathbb{k}_z: z = 3 \land \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$

$$_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\mathbf{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\mathbf{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{l_i}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - [illegible])!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{([illegible] - \boldsymbol{l_i})!}{(D + [illegible] - \boldsymbol{n} - \boldsymbol{l_i})! \cdot ([illegible] - j_i)!}$$

$D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \land$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa} - j_{sa}^{ik} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq [illegible]$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \land \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = [illegible] \land \boldsymbol{l_i} + j_{sa} - [illegible] \boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n \land I \;=\; \mathbb{k} \;>\; 0 \land$

$j_{sa} < j_{sa}^{i} - 1 \land j_{sa}^{ik} = j_{sa} - [illegible] \land j_{sa}^{s} = j_{sa} [illegible] 1 \land$

$\boldsymbol{s}\colon \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, [illegible]\} \land$

$s \geq 5 \land \boldsymbol{s} = s + [illegible] \land$

$\mathbb{k}_{[illegible]} : z = 3 \land [illegible] = \mathbb{k}_1 + [illegible] + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s\;,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\;\;)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-\mathbb{k}_3-1)!}{(j_{i}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_{i}-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_{s}-1)!}{(n_{s}+j_{i}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_{i})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_{s})!\cdot(j_{s}-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_{i}-\boldsymbol{l_{sa}})!\cdot(j_{i}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_{i}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_{i})!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdot\cdot, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\big((D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \land$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \land \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \land \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \lor$

$(D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \land$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \land$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \land$

$D \geq \boldsymbol{n} < n \land I = \mathbb{k} > 0 \land$

$j_{sa} < j_{sa}^{i} - 1 \land j_{sa}^{ik} = j_{sa} - 1 \land j_{sa}^{s} = j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \land$

$s \geq 5 \land \boldsymbol{s} = s + \mathbb{k} \land$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{i}\text{[illegible]}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s\text{[illegible]}-j_i+1}^{n_{sa}+j^{sa}-j_i-\text{[illegible]}}$$

$$\frac{(n_i \text{[illegible]} - 1)!}{(j_s-2\text{[illegible]}(n_i-n_{is}\text{[illegible]}+1)!}\cdot$$

$$\frac{(n_{is}-n_{i\text{[illegible]}}\text{[illegible]}1)!}{(j_{ik}-j_{\text{[illegible]}}\text{[illegible]}(n_{is}+j_{\text{[illegible]}}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{i\text{[illegible]}}\text{[illegible]}n_{sa}-1)!}{(j^{sa}-j_{i\text{[illegible]}}\text{[illegible]}1)!\cdot(\text{[illegible]}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}\text{[illegible]}n_s-\mathbb{k}_3\text{[illegible]}1)!}{(j_i\text{[illegible]}j^{sa}-1)!\cdot(n_{\text{[illegible]}}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\text{[illegible]}\boldsymbol{n}\text{[illegible]}\wedge \boldsymbol{l_s}>1\wedge \boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j\text{[illegible]}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq \boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq \boldsymbol{n}<n\wedge I\ =\ \mathbb{k}\ >\ 0\wedge$

$j_{sa}=j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i} \right\} \land$

$s \geq 6 \land \boldsymbol{s} = s + \mathbb{k} \land$

$\mathbb{k}_z\colon z = 3 \land \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+[illegible]}^{(\ \ )} $$

$$ \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j[illegible]+1)}^{(j_i+j_{sa}-s-1[illegible]} \sum_{j[illegible]s+2}^{[illegible]a+j_{sa}-s} $$

$$ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n[illegible]+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=[illegible]\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} $$

$$ \sum_{([illegible]=\boldsymbol{n}+\mathbb{k}_3-j[illegible]1)}^{(n_{ik}[illegible]-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{[illegible]-j_i-\mathbb{k}_3} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - [illegible])! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{([illegible] - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - [illegible]_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{([illegible] - [illegible]_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot $$

$$ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot $$

$$ \frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} + $$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_{sa}}+j_{sa}-s\text{[illegible]}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2\text{[illegible]}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-\text{[illegible]}1)}^{(n_{ik}+j_{ik}-j^{sa}\text{[illegible]}} \sum_{n_s=\boldsymbol{n}-j_i+\text{[illegible]}}^{\text{[illegible]}+j^{\text{[illegible]}}j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{\text{[illegible]}}1)!}{(j_s\text{[illegible]}2)!\cdot(\text{[illegible]}j_s+1)!}\cdot$$

$$\frac{\text{[illegible]}-n_{ik}\text{[illegible]}\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\text{[illegible]}n_{is}+j_s\text{[illegible]}n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{s\text{[illegible]}}-\mathbb{k}_2-1)!}{\text{[illegible]}^{sa}-j_{ik}\text{[illegible]}1)!\cdot(n_{ik}\text{[illegible]}j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{\text{[illegible]}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} <$ [illegible] $\boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s}^{\boldsymbol{l}_i+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+j^{sa}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-s)}^{(\ )} \sum_{j_i=s}^{\boldsymbol{l}_i+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j^{sa}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}=j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\mathbf{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge \mathbf{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)}\ \sum_{j_i=s}^{\mathbf{l}_i+j_{sa}^{ik}-s}
$$

$$
\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot
$$

$$
\frac{(\mathbf{l_s}-2)!}{(\mathbf{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{(\mathbf{l_{sa}}+j_{sa}^{ik}-\mathbf{l_{ik}}-j_{sa})!}{(j_{ik}+\mathbf{l_{sa}}-j^{sa}-\mathbf{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(\mathbf{l_i}+j_{sa}-\mathbf{l_{sa}}-s)!}{(j^{sa}+\mathbf{l_i}-j_i-\mathbf{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=l\cdots+j_{sa}^{ik}-s+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=s+[illegible]}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

[illegible] $> \boldsymbol{n}$ [illegible] $\wedge\ \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \le D + s - \boldsymbol{n} \wedge$

$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i} \right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )} \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(j_i + j_{sa} - s - 1)} \sum_{(j^{sa} = j_{sa} + 1)}^{j_i - 1} \sum_{j_i = s + 2}$$

$$\sum_{n_i = \boldsymbol{n} + \Bbbk} \sum_{(n_{is} = n_i + \Bbbk - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \Bbbk_2 + \Bbbk_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \Bbbk_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \Bbbk_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \Bbbk_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=\boldsymbol{l_s}+\ldots}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=[\text{illegible}]-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{([\text{illegible}]=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=[\text{illegible}]}^{[\text{illegible}]+s-1} $$

$$ \sum_{n_i=\boldsymbol{n}[\text{illegible}]}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk[\text{illegible}]+1)}^{[\text{illegible}]+1)} \sum_{n_{ik}=\boldsymbol{n}+[\text{illegible}]-j_{ik}+1}^{[\text{illegible}]+j_s-j_{ik}-\Bbbk_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}[\text{illegible}]_3-j^{sa}+1)}^{[\text{illegible}]+j_{ik}-j[\text{illegible}]\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot $$

$$ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot $$

$$ \frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} + $$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{\mathbf{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\;)} \sum_{j_i=\mathbf{l_i}}^{\mathbf{l_i}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\mathbf{l_s}-2)!}{(\mathbf{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\mathbf{l_{sa}}+j_{sa}^{ik}-\mathbf{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\mathbf{l_{sa}}-j^{sa}-\mathbf{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\mathbf{l_i})!}{(D+j_i-\mathbf{n}-\mathbf{l_i})!\cdot(\mathbf{n}-j_i)!}$$

$D > \mathbf{n} < n \wedge \mathbf{l_s} > 1 \wedge \mathbf{l_i} \leq D + s - \mathbf{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$

$\mathbf{l_{ik}} - j_{sa}^{ik} + 1 > \mathbf{l_s} \wedge \mathbf{l_{sa}} + j_{sa}^{ik} - j_{sa} = \mathbf{l_{ik}} \wedge \mathbf{l_i} + j_{sa} - s = \mathbf{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik})} \sum_{\text{[illegible]}j_s=2)}^{\text{[illegible]}} \sum_{j_{ik}=\text{[illegible]}j_{sa}}^{\text{[illegible]}} \sum_{(j^{sa}=\text{[illegible]}j_{sa}-s)}^{(\text{[illegible]})} \sum_{j_i=s+2}^{\text{[illegible]}s-1} \sum_{n_i=\boldsymbol{n}+\Bbbk}^{n\text{[illegible]}} \sum_{(n_{is}=\text{[illegible]}+\Bbbk-j_s+1\text{[illegible]})}^{(n_i\text{[illegible]}+1)} \sum_{\text{[illegible]}k=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{\text{[illegible]}-\Bbbk_1} \sum_{(n_{sa}=\text{[illegible]}\Bbbk_3-j^{sa}+1)}^{(n_{ik}\text{[illegible]}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(\text{[illegible]}k - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}=j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=\cdots-j_{sa}^{ik}+1)}^{(\;)} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+1)}^{(\cdots+j_{sa}-s-1)}\sum_{j_i=\cdots2}^{\cdots+s-1} $$

$$ \sum_{n_i=\boldsymbol{n}\cdots}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\cdots+1)}^{(\cdots+1)}\sum_{n_{ik}=\boldsymbol{n}+\cdots-j_{ik}+1}^{\cdots+j_s-j_{ik}-\mathbb{k}_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}\cdots_3-j^{sa}+1)}^{(\cdots_k+j_{ik}-j\cdots\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} $$

$$ \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot $$

$$ \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot $$

$$ \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot $$

$$ \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot $$

$$ \frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot $$

$$ \frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot $$

$$ \frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot $$

$$ \frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot $$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=s}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2 \ldots -j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j \ldots +1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \ldots)}\sum_{n_s=\boldsymbol{n}-j_i+\ldots}^{\ldots +j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i \ldots -j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\ldots > \boldsymbol{n} \ldots \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}\colon \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z\colon z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(\text{[illegible]}_{ik} - j_{sa}^{ik} + 1)} \sum_{(\text{[illegible]}=2)}^{\text{[illegible]}}$$

$$\sum_{j_{i\text{[illegible]}}}^{\text{[illegible]}^{ik} - j_{sa}} \sum_{(j^{\text{[illegible]}}\text{[illegible]}_{a}+1)}^{(j_i + j_{sa} - s - \text{[illegible]})} \sum_{j_i = s+2}^{\text{[illegible]} s - 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n\text{[illegible]}} \sum_{(n_{i\text{[illegible]}}\text{[illegible]} + \mathbb{k} - j_s + \text{[illegible]})}^{(n_i \text{[illegible]} + 1)} \sum_{\text{[illegible]}_k = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{\text{[illegible]} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \text{[illegible]}\mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + \text{[illegible]} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+j_{ik}-j^{sa}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j_i+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s+1}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\mathbf{n}+\Bbbk}^{n} \sum_{(n_{is}=\mathbf{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\mathbf{n}-\boldsymbol{l_i})!\cdot(\mathbf{n}-j_i)!}$$

$D > \mathbf{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D + s - \mathbf{n} \land$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \land$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \land \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \land \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \land$

$D \geq \mathbf{n} < n \land I = \Bbbk > 0 \land$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{\text{[illegible]}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}\text{[illegible]})} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{\text{[illegible]}=j_i+j_{sa}-s)}^{(\text{[illegible]})} \sum_{j_i=\text{[illegible]}}^{\text{[illegible]}+s-1} $$

$$ \sum_{n_i=\boldsymbol{n}\text{[illegible]}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\text{[illegible]}+1)}^{\text{[illegible]}+1)} \sum_{n_{ik}=\boldsymbol{n}+\text{[illegible]}-j_{ik}+1}^{\text{[illegible]}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}\text{[illegible]}_3-j^{sa}+1)}^{\text{[illegible]}+j_{ik}-j\text{[illegible]}\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot $$

$$ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot $$

$$ \frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot $$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_i+j_{sa}\ldots)}^{(\ )}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l}\ldots}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s\ldots)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2\ldots}^{n_{is}+j_s-\ldots-\Bbbk_1}\ldots$$

$$\sum_{(n_{sa}\ldots+\Bbbk_3-j\ldots)}^{(n_{ik}+j_{ik}-j^{sa}\ldots)}\sum_{n_s\ldots-j_i+1}^{n_{sa}+j^{sa}-j_i-1}$$

$$\frac{(\ldots-n_{is}-1)!}{(\ldots-2)!\cdot(\ldots-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\ldots-\Bbbk_1-1)!}{(j_{ik}-\ldots-1)!\cdot(n_{is}\ldots+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j\ldots-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=s}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i+j_s-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\vee$

$(D \geq \mathbf{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \mathbf{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \mathbf{n})\big) \wedge$

$D \geq \mathbf{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$f_z(\text{[illegible]}, j_{ik}, j^{sa}, j_i) = \sum_{\text{[illegible]}=1}^{\text{[illegible]}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\mathbf{n}+\Bbbk}^{\text{[illegible]}} \sum_{(n_{is}=\mathbf{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum\sum_{(j_s=2)}^{\left(j_{ik}-j_{sa}^{ik}+1\right)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{\ldots}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=\ldots}^{\ldots}\sum_{(j^{sa}=\ldots-s)}^{(\ldots)}\sum_{j_i=s+2}^{\ldots-1}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{\ldots}\sum_{(n_{is}=\ldots+\Bbbk-j_s+1)}^{(n_i-\ldots1)}\sum_{\ldots=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{\ldots-\Bbbk_1}$$

$$\sum_{(n_{sa}=\ldots\Bbbk_3-j^{sa}+1)}^{(n_{ik}+\ldots-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}=j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}=j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_s}-s)!}{(j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}-j_i)!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^{i} -$ [illegible] $\wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik},$ [illegible] $\mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge I = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\mathbb{k}_3-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\ \sum_{\left(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1\right)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \text{[illegible]})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} \text{[illegible]} n_s - j_i)!} \cdot$$

$$\frac{(\text{[illegible]} - 1)!}{(n_s + \text{[illegible]} - \boldsymbol{n} - 1\text{[illegible]}(\text{[illegible]} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} \text{[illegible]})! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\text{[illegible]}\boldsymbol{l_{sa}} + j_{sa} \text{[illegible]} \boldsymbol{l_{ik}} - j_{sa}\text{[illegible]})!}{(j_{ik} + \boldsymbol{l_{sa}} - j\text{[illegible]}\boldsymbol{l_{ik}})! \cdot (\text{[illegible]} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\text{[illegible]} - \boldsymbol{l_i})!}{(D \text{[illegible]} j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq$ [illegible] $+ s - \boldsymbol{n}$ [illegible]

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s +$ [illegible] $- 1 \leq j_{ik} \leq$ [illegible]$^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq$ [illegible]$^{sa} \leq j_i + j_{sa} -$ [illegible] $\wedge\, j^{sa} + s$ [illegible] $j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} +$ [illegible] $= \boldsymbol{l_s} \wedge \boldsymbol{l}$[illegible] $+ j_{sa}^{ik} - j_{sa} > \boldsymbol{l}$[illegible] $\boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I$ [illegible] $\Bbbk > 0$[illegible]

$j_{sa} =$ [illegible] $- 1 \wedge j_{sa}^{ik} <$ [illegible] $- 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots,$ [illegible] $j_{sa}^{ik}, \cdots, \Bbbk$[illegible]$_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq$ [illegible] $= s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge$ [illegible] $= \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_{ik}} + j_{sa}^{ik} - s)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\;\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\;\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\;\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\;\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\;\sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1)}^{(\boldsymbol{l_{sa}})}\;\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\;\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\;\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\mathbf{l_s}-2)!}{(\mathbf{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\mathbf{l_{sa}}+j_{sa}^{ik}-\mathbf{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\mathbf{l_{sa}}-j^{sa}-\mathbf{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\mathbf{l_i}+j_{sa}-\mathbf{l_{sa}}-s)!}{(j^{sa}+\mathbf{l_i}-j_i-\mathbf{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\mathbf{l_i})!}{(D+j_i-\mathbf{n}-\mathbf{l_i})!\cdot(\mathbf{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\mathbf{l_{ik}}+j_{sa}^{ik}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \text{[illegible]})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} \text{[illegible]} n_s - j_i)!} \cdot$$

$$\frac{\text{[illegible]} - 1)!}{(n_s + \text{[illegible]} - \boldsymbol{n} - 1 \text{[illegible]} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} \text{[illegible]})! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa} \text{[illegible]} \boldsymbol{l_{ik}} - j_{sa} \text{[illegible]}}{(j_{ik} + \boldsymbol{l_{sa}} - j \text{[illegible]} \boldsymbol{l_{ik}})! \cdot (\text{[illegible]} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\text{[illegible]} - \boldsymbol{l_i})!}{(D \text{[illegible]} j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq \text{[illegible]} + s - \boldsymbol{n} \text{[illegible]}$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + \text{[illegible]}^{ik} - 1 \leq j_{ik} \leq \text{[illegible]}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq \text{[illegible]}^{sa} \leq j_i + j_{sa} - \text{[illegible]} \wedge j^{sa} + s \text{[illegible]} j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \text{[illegible]} = \boldsymbol{l_s} \wedge \boldsymbol{l} \text{[illegible]} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l} \text{[illegible]} \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I \text{[illegible]} \mathbb{k} > 0 \text{[illegible]}$

$j_{sa} = \text{[illegible]} - 1 \wedge j_{sa}^{ik} < \text{[illegible]} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \text{[illegible]} j_{sa}^{ik}, \cdots, \mathbb{k} \text{[illegible]}_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq \text{[illegible]} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \text{[illegible]} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_s} + j_{sa} - 1)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\mathbb{k}_3-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s < j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{i} = j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}} $$

$$ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_{sa}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} $$

$$ \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot $$

$$ \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot $$

$$ \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot $$

$$ \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot $$

$$ \frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot $$

$$ \frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot $$

$$ \frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot $$

$$ \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+ $$

$$ \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}} $$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\;\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\;\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\;\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 0 \wedge \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\mathbb{k}_3-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j^{ik}_{sa}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j^{ik}_{sa}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\mathbf{n}-\boldsymbol{l_i})!\cdot(\mathbf{n}-j_i)!}$$

$D \geq \mathbf{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + j_i - \mathbf{n} \wedge$

$1 \leq j_s \leq j_{ik} - j^{ik}_{sa} + 1 \wedge j_s + j^{ik}_{sa} - 1 \leq j_{ik} \leq j^{sa} + j^{ik}_{sa} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j^{ik}_{sa} < j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$

$\boldsymbol{l_{ik}} - j^{ik}_{sa} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j^{ik}_{sa} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} > j^{i}_{sa} - 1 \wedge j^{ik}_{sa} < j_{sa} - 1 \wedge j^{s}_{sa} < j^{ik}_{sa} - 1 \wedge$

$\boldsymbol{s}: \left\{j^{s}_{sa}, \cdots, \mathbb{k}_1, j^{ik}_{sa}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j^{i}_{sa}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\,)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\,)}
$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-\mathbb{k}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-\mathbb{k}_3-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 0 \wedge \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} < j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-\Bbbk_3-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 0 \wedge \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa}^{i} = j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_i=j^{sa}+s-\cdots}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2\cdots-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-\Bbbk_3-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_i}-s+1>\boldsymbol{l_s}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\big)\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i} \} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{[illegible]} \sum_{(\boldsymbol{l_s}=2)}^{([illegible]_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j_s+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s} [illegible] - 1)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{[illegible]}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k\,[illegible]}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=\boldsymbol{l_s}+[illegible])}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}^{[illegible]}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}\text{[illegible]})}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{\text{[illegible]}j^{sa}\text{[illegible]}-j_{sa}}^{\text{[illegible]}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}\text{[illegible]}+\mathbb{k}\text{[illegible]})}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}\text{[illegible]}+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}\text{[illegible]}}$$

$$\sum_{(n_s\text{[illegible]}\boldsymbol{n}+\mathbb{k}_3-j^{s}\text{[illegible]})}^{(n_{ik}+\text{[illegible]}j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}\text{[illegible]}+j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - \text{[illegible]})! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - \text{[illegible]}_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\text{[illegible]} j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \land$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \land j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \land$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \land j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \land \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \land \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n \land I = \mathbb{k} > 0 \land$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}^{i}+1}^{s}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_{ik}, [illegible]} = \sum_{[illegible]} \sum_{(j_s [illegible] - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa} = [illegible] + j_{sa} - j_{sa}^{ik})}^{([illegible]} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = [illegible] \boldsymbol{n} + \mathbb{k}}^{[illegible]} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s [illegible]} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$S_{j_s,j_{ik},\dots,j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(n-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I\;=\;\mathbb{k}\;>\;0\wedge$

$j_{sa}=j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$${}_{fz}S_{j_s\;,j_{ik},j^{sa},j_i}=\sum_{k=1}\;\sum_{\left(j_s=j_{ik}-j_{sa}^{ik}+1\right)}^{(\;\;)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\;\sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\boldsymbol{l_{sa}})}\;\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\;\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\;\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\;\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l_{ik}} - j_{sa}^{ik})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \Bbbk}^{n} \sum_{(n_{is} = \boldsymbol{n} + \Bbbk - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \Bbbk_2 + \Bbbk_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \Bbbk_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \Bbbk_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \Bbbk_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}=j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s$ [illegible] $\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \geq 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$\boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq \boldsymbol{n}<n\wedge \boldsymbol{l_s}+1\leq \boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq \boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq \boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}=j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )} \sum_{j_i=\text{[illegible]}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{\text{[illegible]}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{\text{[illegible]}}}^{\text{[illegible]}+j_s-j_{\text{[illegible]}}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}\text{[illegible]}-j^{sa}+1)}^{\text{[illegible]}-j^{sa}-\mathbb{k}_2)} \sum_{n_s\text{[illegible]}j_i+1}^{\text{[illegible]}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{\text{[illegible]}} - \mathbb{k}_1 - 1)!}{(\text{[illegible]} - j_s \text{[illegible]})! \cdot (\text{[illegible]} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{\text{[illegible]}} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} + 1 \leq \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \land \boldsymbol{s} = s + \Bbbk \land$

$\Bbbk_z : z = 3 \land \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\land\boldsymbol{l_s}>1\land\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\land$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\land j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\land$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\land j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\land$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i} \right\} \wedge$$

$$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=[illegible])}^{(j_{[illegible]} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=[illegible]+1}^{\boldsymbol{l_s} + j_{sa}^{ik} - 1} \sum_{(j^{sa}=[illegible] j_{sa} - j_{sa}^{ik})}^{(\quad)} \sum_{[illegible] j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{[illegible]\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}[illegible]+1)}^{([illegible]_i - j_s + 1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+[illegible]-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=\ldots)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}\ldots)}^{(\;)}\sum_{j_i=j^{sa}\ldots-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\ldots)}^{(n_i-j_s+1)}\sum_{n_{ik}=\ldots+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\ldots}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-\ldots)}^{(n_{ik}+\ldots-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{\ldots-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\ldots)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-\ldots-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(\ldots_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j^{sa}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j_i+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D > \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{[illegible]} \sum_{[illegible]=2)}^{[illegible]_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{[illegible]j_{sa}-j_{sa}^{ik}+[illegible]}^{(\boldsymbol{l}[illegible]} \sum_{[illegible]=j^{sa}+s-j_{sa}}^{[illegible]}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n[illegible]} \sum_{(n_{is}[illegible]+\mathbb{k}-j_s+1)}^{(n_i-[illegible]1)} \sum_{[illegible]=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{[illegible]-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=[illegible]\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+[illegible]-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{([illegible]_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{[illegible]} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+j_{sa}^{ik}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-\ldots}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2\ldots-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-\ldots)}^{(n_{ik}+j_{ik}-j^{sa}-\ldots)} \sum_{n_s=\boldsymbol{n}-j_i+\ldots}^{\ldots+j^{s\ldots}\ldots j_i-\mathbb{k}_3}$$

$$\frac{(\ldots-n_{is}\ldots 1)!}{(j_s\ldots 2)!\cdot(n_i\ldots j_s+1)!}\cdot$$

$$\frac{(\ldots-n_{ik}\ldots\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s\ldots n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{s\ldots}\ldots\mathbb{k}_2-1)!}{(\ldots-j_{ik}\ldots 1)!\cdot(n_{ik}\ldots j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(\ldots-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$(D \geq \ldots n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I \ = \ \mathbb{k} \ > \ 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}\colon \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z\colon z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$f z \text{[illegible]}, j_{ik}, j^{sa}, \text{[illegible]} = \sum_{\text{[illegible]}k=1}^{\text{[illegible]}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{\text{[illegible]}=j_{sa}^{ik}+1}^{\boldsymbol{l_s} \text{[illegible]}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\text{[illegible]}a)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{\text{[illegible]}=\boldsymbol{n}+\mathbb{k}}^{\text{[illegible]}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\text{[illegible]}\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\text{[illegible]}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}\text{[illegible]})!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})\text{[illegible]}(j_i+j_{sa}-\text{[illegible]}-s)!}\cdot$$

$$\frac{(D\text{[illegible]}\boldsymbol{l_i})!}{\text{[illegible]}\boldsymbol{n}-\boldsymbol{l_i}\text{[illegible]}(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{\text{[illegible]}}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\text{[illegible]}}^{\boldsymbol{l_{ik}}}\ \sum_{\text{[illegible]}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{\text{[illegible]}\boldsymbol{n}+\mathbb{k}}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{\text{[illegible]}}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)\text{[illegible]}}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-\text{[illegible]}^{sa}-s)!}\cdot$$

$$\frac{(D\text{[illegible]})!}{(D+j_i\text{[illegible]}\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\text{[illegible]}_i)!}+$$

$$\sum\text{[illegible]}\sum_{\text{[illegible]}=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{\text{[illegible]}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{i\text{[illegible]}}j_{sa}-j_{sa}^{ik})}^{(\text{[illegible]})}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i\text{[illegible]}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j\text{[illegible]})}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-\text{[illegible]})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{\text{[illegible]}}\sum_{(j_s=\text{[illegible]})}^{(\text{[illegible]}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=\text{[illegible]}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-\text{[illegible]}}\sum_{(j^{sa}=\text{[illegible]}j_{sa}-j_{sa}^{ik})}^{(\text{[illegible]})}\sum_{j_i=\text{[illegible]}+s-j_{sa}}^{\text{[illegible]}}$$

$$\sum_{n_i=\text{[illegible]}\mathbb{k}}^{\boldsymbol{n}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-\text{[illegible]}+1)}^{(\text{[illegible]}+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\text{[illegible]}_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(\text{[illegible]}_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$[illegible] S_{[illegible]_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{sa}} - j_{sa} + 1)}$$

$$\sum_{[illegible] j_s + j_{sa}^{ik} - 1} \sum_{\left(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}\right)}^{(\quad)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\Bbbk>0\wedge$

$j_{sa}=j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\Bbbk_1,j_{sa}^{ik},\cdots,\Bbbk_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\Bbbk\wedge$

$\Bbbk_z:z=3\wedge\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3\Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - \Bbbk_3 - 1)!}{(n_s + j_i - \boldsymbol{n} - \Bbbk_3 - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{ik}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{sa}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa}^{i} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}\!: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 3 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z\!: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\Bbbk_3-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 0 \wedge \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa}^{i} > j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge s > 1 \wedge j_i \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\Bbbk_2} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}
$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}=j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\mathbb{k}}\sum_{(\boldsymbol{l_s}=2)}^{(\boldsymbol{l_s})}
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=\boldsymbol{l}+s-j_{sa}}
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z\colon z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{[illegible]=j_s+j_{sa}^{ik}}^{[illegible]} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{([illegible])} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}\geq\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s\geq\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I\;=\;\Bbbk\;>\;0\wedge$

$j_{sa}=j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\Bbbk_1,j_{sa}^{ik},\cdots,\Bbbk_2,j_{sa},\Bbbk_3,j_{sa}^{i}\right\}$

$s\geq 6\wedge\boldsymbol{s}=s+\Bbbk\wedge$

$\Bbbk_z\colon z=3\wedge\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}=j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - \boldsymbol{n} - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (-j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} = j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s-\Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1+\Bbbk_2+\Bbbk_3$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \text{[illegible]})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(\text{[illegible]} - 1)!}{(n_s + \text{[illegible]} - \boldsymbol{n} - 1)! \cdot (\text{[illegible]} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - \text{[illegible]})! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\text{[illegible]}\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l_{ik}} - j_{sa}\text{[illegible]})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{\text{[illegible]}} - \boldsymbol{l_{ik}})! \cdot (\text{[illegible]} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\text{[illegible]} - \boldsymbol{l_i})!}{(D\text{[illegible]}j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\big((D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i}$ [illegible] $D + s -$ [illegible]

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s +$ [illegible] $- 1 \leq j_{ik} \leq$ [illegible] $+ j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq$ [illegible] $\leq j_i + j_{sa} -$ [illegible] $j^{sa} +$ [illegible] $j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_i}$ [illegible] $- j_{sa}^{ik} +$ [illegible] $> \boldsymbol{l_s} \land \boldsymbol{l_s}$ [illegible] $+ j_{sa}^{ik} - j_{sa} >$ [illegible] $\boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \lor$

$(D \geq \boldsymbol{n} < n \land \boldsymbol{l_s}$ [illegible] $1 \land \boldsymbol{l_s}$ [illegible] $1 \land$

$1 \leq j_s$ [illegible] $j_{ik} - j_{sa}^{ik} + 1$ [illegible] $j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} -$ [illegible] $\leq j^{sa} \leq$ [illegible] $+ j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_i}$ [illegible] $> \boldsymbol{l_s} \land$

$\boldsymbol{l_i} \leq D + s$ [illegible] $\boldsymbol{n})\big) \land$

[illegible] $n \land I = \mathbb{k} > 0 \land$

$j_{sa} = j_{sa}^{i} - 1 \land j_{sa}^{ik} < j_{sa} - 1 \land j_{sa}^{s} < j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}\colon \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^{i}\} \land$

$s \geq 6 \land \boldsymbol{s} = s + \mathbb{k} \land$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\;\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})}\;\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\;\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\;\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\;\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{i}\text{[illegible]}1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s\text{[illegible]}-j_i+1}^{n_{sa}+j^{sa}-j_i-\text{[illegible]}}$$

$$\frac{(n_i\text{[illegible]}-1)!}{(j_s-2\text{[illegible]}(n_i-n_{is}\text{[illegible]}+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}\text{[illegible]}1)!}{(j_{ik}-j_s-1\text{[illegible]}+j_s-n\text{[illegible]}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{\text{[illegible]}n_{ik}-n_s\text{[illegible]}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1\text{[illegible]}(n_{ik}+j\text{[illegible]}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{\text{[illegible]}_{sa}-n_s\text{[illegible]}1)!}{(j_i-j^{sa}-1\text{[illegible]}(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$ {}_{z}S_{j_s, j_{ik}, [illegible], j_i} = \sum_{k=1}^{[illegible]} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} $$

$$ \sum_{[illegible]=j^{sa}+j_{sa}^{ik}-[illegible]}^{[illegible]} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+[illegible]s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_{sa}}+j_{sa}-s} $$

$$ \sum_{n_i=[illegible]+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{([illegible]j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot $$

$$ \frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\text{[illegible]})!}+$$

$$\sum_{k=1}\ \sum_{(j_s=\text{[illegible]}j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_s^{ik}\text{[illegible]}}\ \sum_{(j^{sa}=j_{sa}+\text{[illegible]})}^{(\boldsymbol{l_{sa}})}\ \sum_{\text{[illegible]}=\boldsymbol{l_{sa}}+j_{sa}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(\text{[illegible]}\boldsymbol{n}+\mathbb{k}-j_s+\text{[illegible]})}^{(\text{[illegible]}+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+\text{[illegible]}j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}\text{[illegible]}_3-j^{sa}+1)}^{(n_{ik}\text{[illegible]}_{ik}-j^{sa}-\text{[illegible]})}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(\text{[illegible]}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$\cdots S_{j_s, j_{ik}, \cdots, j_i} = \sum_{k=1}^{\cdots} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{\cdots = j^{sa}+j_{sa}^{ik}-\cdots} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+\cdots s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\cdots+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\cdots j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\text{[illegible]})!}+$$

$$\sum_{k=1}\sum_{(j_s=j_{\text{[illegible]}}+j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{s\text{[illegible]}}^{ik}}\sum_{(j^{sa}=j_{sa}+1\text{[illegible]})}^{(\boldsymbol{l_{ik}}\text{[illegible]}-j_{sa}^{ik})}\sum_{\text{[illegible]}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{\text{[illegible]}}=\boldsymbol{n}+\Bbbk-j_s+\text{[illegible]})}^{(n_{\text{[illegible]}}+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{\text{[illegible]}+j_{\text{[illegible]}}-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\text{[illegible]}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}\text{[illegible]}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(\text{[illegible]}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{z}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{[illegible]} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-[illegible]1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{[illegible]} \sum_{j_i=s+2}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-[illegible])!}+$$

$$\sum_{[illegible]=1}\ \sum_{(j_s=j_{i}[illegible]j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{s}^{ik}[illegible]}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=j_i+j_{sa}-[illegible])}^{[illegible])}\ \sum_{[illegible]=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1}^{[illegible]}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n[illegible]}\ \sum_{(n_{i}[illegible]\boldsymbol{n}+\mathbb{k}-j_s+[illegible]}^{(n_i[illegible]+1)}\ \sum_{[illegible]k=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{[illegible]+j_s[illegible]k-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=[illegible]\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}[illegible]-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{([illegible]-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$S_{j_s,j_{ik},\ldots,j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j_{sa}^{ik}\ldots}^{j^{sa}+\ldots-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+\ldots s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\ldots+\mathbb{k}}^{\boldsymbol{n}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ldots j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-\text{[illegible]})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\text{[illegible]}=1}^{\text{[illegible]}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}\text{[illegible]})}^{(\text{[illegible]})}$$

$$\sum_{\text{[illegible]}=j_{sa}^{ik}+1}\sum_{(\text{[illegible]}j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i\text{[illegible]}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\text{[illegible]}+1)}^{(\text{[illegible]}j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\text{[illegible]}n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(\text{[illegible]}_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+\cdots)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\sum_{(j^{sa}=j_i+\cdots)}^{(\ )}\sum_{j_i=\cdots+2}^{\cdots+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\cdots)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}\cdots+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\cdots}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}\cdots)}^{(n_{ik}+\cdots j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}\cdots+j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\cdots)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, \ldots} = \sum_{\ldots} \sum_{(j_s = \ldots - j_{sa}^{ik} + 1)}^{(\ )} \sum_{j_{ik} = j^{sa} + \ldots - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(j_i + j_{sa} - s - 1)} \sum_{j_i = s + 2}^{\boldsymbol{l_s} + s - 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s \ldots)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\,)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_i+s-j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-s)}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-1)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i} \right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} \; \sum_{\text{[illegible]}} \; \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{\text{[illegible]}}
$$

$$
\sum_{\text{[illegible]} j_{sa}^{ik} + 1}^{j^{sa} + j_{s\text{[illegible]}} - j_{sa} - 1} \; \sum_{(\text{[illegible]} = j_i + j_{sa} - s)}^{(\text{[illegible]})} \; \sum_{j_i = s + 2}^{\boldsymbol{l_s} + s - 1}
$$

$$
\sum_{n_i = \boldsymbol{n} \text{[illegible]}}^{n} \; \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} \text{[illegible]} s + 1)}^{(n_i - \text{[illegible]} 1)} \; \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{\text{[illegible]}_{is} + j_s - j_{ik} - \mathbb{k}_1}
$$

$$
\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \; \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+\ldots}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_i+\ldots)}^{(\ )}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\ldots\mathbb{k}-j_s\ldots)}^{(n_i-j_s+1)}\sum_{\ldots=\boldsymbol{n}+\ldots\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}\ldots+\mathbb{k}_3-j^{sa}\ldots)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+\ldots-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \land$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \land \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \land \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \land$$

$$D \geq \boldsymbol{n} < n \land I = \mathbb{k} > 0 \land$$

$$j_{sa} < j_{sa}^{i} - 1 \land j_{sa}^{ik} = j_{sa} - 1 \land j_{sa}^{s} < j_{sa}^{ik} - 1 \land$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \land$$

$$s \geq 6 \land \boldsymbol{s} = s + \mathbb{k} \land$$

$$\mathbb{k}_z: z = 3 \land \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$[illegible] \; j_i \; [illegible] \sum_{k[illegible]} \; \sum_{(j_s=2)}^{(j_{ik}-j_{s}[illegible])}$$

$$\sum_{j_{ik}=j^{sa}+j_{s}[illegible]j_{sa}} \; \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\;\;)} \; \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n[illegible]\boldsymbol{n}+\mathbb{k}} \; \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s[illegible])} \; \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \; \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2\ldots}^{(\boldsymbol{l_s}\ldots}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\ldots}\sum_{(j^{sa}=j_i\ldots s)}^{(\ )}\sum_{\ldots\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}\ldots+\mathbb{k}\ldots)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}\ldots+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}\ldots}$$

$$\sum_{(n_s\ldots\boldsymbol{n}+\mathbb{k}_3-j^{s}\ldots)}^{(n_{ik}+\ldots j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}\ldots j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\ldots)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{[illegible]} = \sum_{[illegible]} \sum_{(j_s = [illegible] - j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik} = [illegible] + 1}^{j^{sa}+j_{sa}^{ik} [illegible]} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i = [illegible] + \mathbb{k}}^{[illegible]} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i - j_s [illegible])} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\text{[illegible]})!}+$$

$$\sum_{\text{[illegible]}=1}\ \sum_{(j_s=j_{i\text{[illegible]}}\,j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{\text{[illegible]}-j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_s\text{[illegible]}}\ \sum_{(j^{\text{[illegible]}}\,a+1)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=\boldsymbol{l_s}+s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n\text{[illegible]}}\ \sum_{(n_{is}\text{[illegible]}+\mathbb{k}-j_s+1\text{[illegible]}}^{(n_i\text{[illegible]}+1)}\ \sum_{\text{[illegible]}_k=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\text{[illegible]}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\text{[illegible]}\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+\text{[illegible]}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(\text{[illegible]}_k-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=s+2}^{\boldsymbol{l_s}+s}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\ldots)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{ik}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=s}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa})}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}\colon \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z\colon z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}\text{[illegible]})}
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(\text{[illegible]}=j_i+j_{sa}-s)}^{(\text{[illegible]})} \sum_{j_i=\text{[illegible]}}^{\text{[illegible]}+s-1}
\sum_{n_i=\boldsymbol{n}\text{[illegible]}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk\text{[illegible]}+1)}^{(\text{[illegible]}+1)} \sum_{n_{ik}=\boldsymbol{n}+\text{[illegible]}-j_{ik}+1}^{\text{[illegible]}+j_s-j_{ik}-\Bbbk_1}
\sum_{(n_{sa}=\boldsymbol{n}\text{[illegible]}_3-j^{sa}+1)}^{(\text{[illegible]}+j_{ik}-j\text{[illegible]}\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_i+j_{sa}-k)}^{(\ )}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$(D > \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \land$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \land j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \land$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \land j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \land \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \land \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}}) \lor$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$f_Z(\boldsymbol{s}, j_{ik}, j^{sa}, j_i) = \sum_{\Bbbk=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{[illegible]}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{[illegible]}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{[illegible]=\boldsymbol{n}+\Bbbk}^{[illegible]}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\text{[illegible]}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)\text{[illegible]}}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-\text{[illegible]}^{sa}-s)!}\cdot$$

$$\frac{(D\text{[illegible]})!}{(D+j_i\text{[illegible]}\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\text{[illegible]}j_i)!}+$$

$$\text{[illegible]}\sum_{\text{[illegible]}=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}\text{[illegible]}}^{j^{\text{[illegible]}}\text{[illegible]}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ \ )}\ \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i\text{[illegible]}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j\text{[illegible]})}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{k=1}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=[illegible]} \sum_{(j^{sa}=[illegible]-s)}^{(\ )} \sum_{j_i=s+2}^{[illegible]-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{[illegible]} \sum_{(n_{is}=[illegible]+\mathbb{k}-j_s+1)}^{(n_i-[illegible]1)} \sum_{[illegible]=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{[illegible]-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=[illegible]\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+[illegible]-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i} \right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z : z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} \text{[illegible]})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq \text{[illegible]} < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s \text{[illegible]} \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{\text{[illegible]}} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_{\text{[illegible]}}, j_{\text{[illegible]}}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$

$$_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_{ik}} + j_{sa}^{ik} - s)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}-j_i)!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge S = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\ \sum_{\left(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1\right)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-\boldsymbol{n}-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}-\boldsymbol{l_{ik}}-j_{sa}^{ik})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_s - 1 \wedge j_{sa}^{ik} = j_{ik} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge n = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l_{ik}} - j_{sa}^{ik})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{s} - 1 \wedge j_{sa}^{ik} = j_{sa}^{s} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 3 \wedge s = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_s} + j_{sa} - 1)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{s}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\Bbbk>0\wedge$

$j_{sa}^{i}=j_{sa}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\Bbbk_1,j_{sa}^{ik},\Bbbk_2,j_{sa},\cdots,\Bbbk_3,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\Bbbk\wedge$

$\Bbbk_z:z=3\wedge\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3\Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}} $$

$$ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} $$

$$ \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot $$

$$ \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot $$

$$ \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot $$

$$ \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot $$

$$ \frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot $$

$$ \frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot $$

$$ \frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot $$

$$ \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+ $$

$$ \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}} $$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 0 \wedge \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \wedge$

$1 \leq j_s < j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} < j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa}^{s} < j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 0 \land \boldsymbol{l_i} \leq D + \boldsymbol{l_s} - \boldsymbol{n} \land$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \land \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \land \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n \land I = \Bbbk > 0 \land$

$j_{sa}^{s} < j_{sa} - 1 \land j_{sa}^{ik} = j_{sa} - 1 \land j_{sa}^{s} < j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\right\} \land$

$s \geq 6 \land \boldsymbol{s} = s + \Bbbk \land$

$\Bbbk_z: z = 3 \land \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 0 \land \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \land$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \land \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \land \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n \land I = \Bbbk > 0 \land$

$j_{sa} < j_{sa} - 1 \land j_{sa}^{ik} = j_{sa} - 1 \land j_{sa}^{s} < j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\right\} \land$

$s \geq 6 \land \boldsymbol{s} = s + \Bbbk \land$

$\Bbbk_z: z = 3 \land \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa})}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>0\wedge\boldsymbol{l_i}\leq D+j_i-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}<j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\Bbbk>0\wedge$

$j_{sa}^{s}<j_{sa}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\Bbbk_1,j_{sa}^{ik},\Bbbk_2,j_{sa},\cdots,\Bbbk_3,j_{sa}^{i}\right\}\wedge$

$s\geq6\wedge\boldsymbol{s}=s+\Bbbk\wedge$

$\Bbbk_z:z=3\wedge\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3\Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-[illegible]}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2[illegible]-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\text{[illegible]}-j_{sa}^{ik}+1)} \sum_{\text{[illegible]}=2)}^{\text{[illegible]}}
\sum_{j_{ik}=\text{[illegible]}}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\text{[illegible]}j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}\text{[illegible]}-1)} \sum_{\text{[illegible]}j^{sa}+s-j_{sa}+1}^{\text{[illegible]}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\text{[illegible]}} \sum_{(n_{is}\text{[illegible]}+\mathbb{k}-j_s+1)}^{(n_i\text{[illegible]}1)} \sum_{\text{[illegible]}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\text{[illegible]}-\mathbb{k}_1}
\sum_{(n_{sa}\text{[illegible]}\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+\text{[illegible]}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - \text{[illegible]})!} +$$

$$\sum_{k\text{[illegible]}} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{i\text{[illegible]}}=\text{[illegible]}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_s}+\text{[illegible]})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\text{[illegible]}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(\text{[illegible]}\boldsymbol{n}+\mathbb{k}-j_s+\text{[illegible]})}^{(n\text{[illegible]}+1)} \sum_{\text{[illegible]}_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\text{[illegible]}+j\text{[illegible]}_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\text{[illegible]}_3-j^{sa}+1)}^{(n_{ik}\text{[illegible]}_k-j^{sa}-\mathbb{k}_2\text{[illegible]})} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\text{[illegible]} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\sum_{(j^{sa}=j_{sa}+\text{[illegible]})}^{(\boldsymbol{l_s}+j_{sa}-1)}\sum_{\text{[illegible]}j^{sa}\text{[illegible]}-j_{sa}}^{\text{[illegible]}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}\text{[illegible]}+\mathbb{k}\text{[illegible]})}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}\text{[illegible]}+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\text{[illegible]}}$$

$$\sum_{(n_s\text{[illegible]}\boldsymbol{n}+\mathbb{k}_3-j^{s}\text{[illegible]})}^{(n_{ik}+\text{[illegible]}j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}\text{[illegible]}j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\text{[illegible]})!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-\text{[illegible]}j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa})}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \land j_{sa}^{ik} = j_{sa} - 1 \land j_{sa}^{s} < j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \land$

$s \geq 6 \land \boldsymbol{s} = s + \mathbb{k} \land$

$\mathbb{k}_z: z = 3 \land \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\text{[illegible]}} $$

$$ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot $$

$$ \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot $$

$$ \frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} $$

$D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \land$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{[illegible]} = \sum_{[illegible]} \sum_{(j_s = [illegible] - j_{sa}^{ik} + 1)}^{(\quad)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa} = [illegible] + j_{sa} - j_{sa}^{ik})}^{([illegible]} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{[illegible] \boldsymbol{n} + \mathbb{k}}^{[illegible]} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s [illegible]} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \land$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \land j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \land$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \land j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \land \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \land \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n \land I = \mathbb{k} > 0 \land$

$j_{sa} < j_{sa}^{i}-1 \land j_{sa}^{ik}=j_{sa}-1 \land j_{sa}^{s} < j_{sa}^{ik}-1 \land$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j_{sa}^{i}\} \land$

$s \geq 6 \land \boldsymbol{s}=s+\mathbb{k} \land$

$\mathbb{k}_z: z=3 \land \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3 \Rightarrow$

$$S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k} \wedge z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{\left(j_s = j_{ik} - j_{sa}^{ik} + 1\right)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}}} \sum_{\left(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1\right)}^{(\boldsymbol{l_{sa}})} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\mathbf{n}-\boldsymbol{l_i})!\cdot(\mathbf{n}-j_i)!}$$

$D \geq \mathbf{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\mathbf{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \mathbf{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D \geq \mathbf{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_s < j_{sa}^{ik}-1 \wedge$

$\mathbf{s}: \{j_{sa}^{s},\cdots,\Bbbk_1,j_{sa}^{ik},\Bbbk_2,j_{sa},\cdots,\Bbbk_3,j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \mathbf{s} = s+\Bbbk \wedge$

$\Bbbk_z: z=3 \wedge \Bbbk = \Bbbk_1+\Bbbk_2+\Bbbk_3$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\mathbf{n}+\Bbbk}^{n}\sum_{(n_{is}=\mathbf{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\mathbf{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \geq 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_s} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_i - 1 \wedge j_{sa}^{s} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$[\text{illegible}] = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\;,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;\;)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\mathbf{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\mathbf{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\mathbf{l_s}-2)!}{(\mathbf{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\mathbf{l_{sa}}+j_{sa}^{ik}-\mathbf{l_{ik}}-j_{sa})!}{(j_{ik}+\mathbf{l_{sa}}-j^{sa}-\mathbf{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\mathbf{l_i})!}{(D+j_i-\mathbf{n}-\mathbf{l_i})!\cdot(\mathbf{n}-j_i)!}$$

$D \geq \mathbf{n} < n \wedge \mathbf{l_s}+1 \leq \mathbf{l_i} \leq D+s-\mathbf{n} \wedge$

$1 \leq j_s \leq \mathbf{l_s}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \mathbf{n} \wedge$

$\mathbf{l_{ik}}-j_{sa}^{ik}+1 > \mathbf{l_s} \wedge \mathbf{l_{sa}}+j_{sa}^{ik}-j_{sa} = \mathbf{l_{ik}} \wedge \mathbf{l_i}+j_{sa}-s = \mathbf{l_{sa}} \wedge$

$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\mathbf{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l}_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot
$$

$$
\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!} \cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot
$$

$$
\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!} \cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)! \cdot (j_s-2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})! \cdot \left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!} \cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!} +
$$

$$
\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\;\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\;)}\;\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\;\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\;\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\;\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge 1\leq\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I\;=\;\mathbb{k}\;>\;0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\text{:}\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j_{sa}^{i}\right\}\wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\text{[illegible]}} \sum_{\text{[illegible]}}^{(j_{\text{[illegible]}} - j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\text{[illegible]}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=\text{[illegible]} j_{sa}-j_{sa}^{ik})}^{(\text{[illegible]})} \sum_{\text{[illegible]} j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{\text{[illegible]}\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\text{[illegible]}+1)}^{(\text{[illegible]}_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+\text{[illegible]}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=\ldots)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}\ldots)}^{(\ )}\sum_{j_i=j^{sa}\ldots-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\ldots+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\ldots+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\ldots}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j\ldots+1)}^{(n_{ik}+\ldots-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{\ldots-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\ldots)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\;)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \land I \;=\; \mathbb{k} \;>\; 0 \land$

$j_{sa} < j_{sa}^{i} - 1 \land j_{sa}^{ik} = j_{sa} - 1 \land j_{sa}^{s} < j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}\colon \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i} \right\} \land$

$s \geq 6 \land \boldsymbol{s} = s + \mathbb{k} \land$

$\mathbb{k}_z\colon z = 3 \land \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s\;,j_{ik},j^{sa},j_i} = \sum_{k=1}^{[illegible]} \sum_{([illegible]=2)}^{([illegible]_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{[illegible]j_{sa}-j_{sa}^{ik}+[illegible]}^{(\boldsymbol{l}[illegible])} \sum_{[illegible]=j^{sa}+s-j_{sa}}^{[illegible]}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n[illegible]} \sum_{(n_{is}[illegible]+\mathbb{k}-j_s+1)}^{(n_i-[illegible]1)} \sum_{[illegible]=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{[illegible]-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=[illegible]\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+[illegible]-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{([illegible]_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{\ldots}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+j_{sa}^{ik}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\boldsymbol{n}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}_1+\mathbb{k}_3-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$(D > \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$f z[illegible], j_{ik}, j^{sa}, j_{[illegible]} = \sum_{[illegible]k=1}^{[illegible]} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{[illegible]=j_{sa}^{ik}+1}^{\boldsymbol{l_s}[illegible]_{a}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{[illegible]a)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{[illegible]=\boldsymbol{n}+\Bbbk}^{[illegible]} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\text{[illegible]}\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\text{[illegible]}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}\text{[illegible]})!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-\text{[illegible]}s)!}\cdot$$

$$\frac{(D\text{[illegible]}\boldsymbol{l_i})!}{(\text{[illegible]}+j\text{[illegible]}\boldsymbol{n}-\boldsymbol{l_i}\text{[illegible]}(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{\text{[illegible]}}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\text{[illegible]}}^{\boldsymbol{l_{ik}}}\sum_{\text{[illegible]}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{\text{[illegible]}\boldsymbol{n}+\mathbb{k}}^{\text{[illegible]}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\text{[illegible]}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-\text{[illegible]}^{sa}-s)!}\cdot$$

$$\frac{(D\ \text{[illegible]})!}{(D+j_i\ \text{[illegible]}\ \boldsymbol{n}-\boldsymbol{l_i})!\cdot(\text{[illegible]}\ j_i)!}+$$

$$\sum_{\text{[illegible]}}\ \sum_{\text{[illegible]}=2)}^{\left(j_{ik}-j_{sa}^{ik}+1\right)}$$

$$\sum_{\text{[illegible]}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{\left(j^{sa}=j_{i}\text{[illegible]}j_{sa}-j_{sa}^{ik}\right)}^{(\text{[illegible]})}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i\text{[illegible]}+\mathbb{k}}^{\boldsymbol{n}}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j\text{[illegible]})}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-[illegible])!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})[illegible]}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot[illegible]\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}\ \sum_{(j_s=[illegible]}^{([illegible]-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=[illegible]+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-[illegible]}\ \sum_{(j^{sa}=[illegible]j_{sa}-j_{sa}^{ik})}^{[illegible])}\ \sum_{j_i=j[illegible]+s-j_{sa}}$$

$$\sum_{n_i=[illegible]\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-[illegible]+1)}^{([illegible]+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{[illegible]_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{([illegible]_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$$S_{[illegible]_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_{sa}}-j_{sa}+1)}$$

$$\sum_{[illegible]j_s+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{l_i} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+\boldsymbol{l_s}-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge$ [illegible] $+j_{sa}^{ik}-j_{sa}>$ [illegible] $\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\Bbbk>0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}=$ [illegible] $-1\wedge j_{sa}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\Bbbk_1,j_{sa}^{ik},\Bbbk_2,j_{sa}^{sa},\cdots,\Bbbk_3,j_{sa}^{i}\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\Bbbk\wedge$

$\Bbbk_z:z=3\wedge\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3\Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > \boldsymbol{s} \wedge \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \wedge$

$1 \leq j_s < j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} < j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{s} < j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\;\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\;)}\;\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\;\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\;\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\;\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge s > 1 \wedge \boldsymbol{l_s} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq \boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I \; = \; \mathbb{k} \; > \; 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z\colon z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}
$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i\text{[illegible]}} = \sum_{k\text{[illegible]}} \sum_{\text{[illegible]}=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}\text{[illegible]}+j_{sa}-j_{sa}\text{[illegible]})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\text{[illegible]}+s-j_{sa}}$$

$$\sum_{\text{[illegible]}=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\text{[illegible]}j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j\text{[illegible]}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$$S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\}$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\ge\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\le D+s-\boldsymbol{n}\wedge$

$1\le j_s\le j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\le j_i\le\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\ge\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\ge 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_s < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s - \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{ik})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}\colon \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge s>1\wedge \boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1<j_s\leq \boldsymbol{l_{ik}}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I\ =\ \mathbb{k}\ >\ 0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z : z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_{sa}}+j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\Bbbk_2} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=\boldsymbol{l_{sa}}+j_{sa}-s+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge s > 1 \wedge s \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z : z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\;)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(j_i + j_{sa} - s - 1)} \sum_{j_i = s + 2}^{\boldsymbol{l_{ik}} + j_{sa}^{ik} - s}$$

$$\sum_{n_i = \boldsymbol{n} + \Bbbk}^{n} \sum_{(n_{is} = \boldsymbol{n} + \Bbbk - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = \boldsymbol{n} + \Bbbk_2 + \Bbbk_3 - j_{ik} + 1)}^{n_{is} + j_s - j_{ik} - \Bbbk_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \Bbbk_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \Bbbk_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\;)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq \boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z : z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=s+2}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-[illegible]}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!} \cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)! \cdot (j_s-2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})! \cdot \left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\,)} \sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge s-1 \leq j_i \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z : z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}\cdots}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=s+2}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} + 1 \leq \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I \ = \ \mathbb{k} \ > \ 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\,)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s-1)} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_s}+s} \sum_{j_i=s+2}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\,)}
$$

$$\sum_{j_{ik}=j^{sa}+j^{ik}_{sa}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s-2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s-2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \land s > 1 \land \boldsymbol{l_s} \leq D + s - \boldsymbol{n} \land$

$1 \leq j_s \leq j_{ik} - j^{ik}_{sa} + 1 \land j_s + j^{ik}_{sa} - 1 \leq j_{ik} \leq j^{sa} + j^{ik}_{sa} - j_{sa} \land$

$j_{ik} + j_{sa} - j^{ik}_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}} - j^{ik}_{sa} + 1 = \boldsymbol{l_s} \land \boldsymbol{l_{sa}} + j^{ik}_{sa} - j_{sa} > \boldsymbol{l_{ik}} \land \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n \land I = \mathbb{k} > 0 \land$

$j_{sa} < j^{i}_{sa} - 1 \land j^{ik}_{sa} < j_{sa} - 1 \land j^{s}_{sa} = j^{ik}_{sa} - 1 \land$

$\boldsymbol{s}: \{j^{s}_{sa}, \mathbb{k}_1, j^{ik}_{sa}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j^{i}_{sa}\} \land$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z : z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1)}^{(n_{is}+j_s-j_{ik}-\Bbbk_1)} \sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{\text{[illegible]}}}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s\text{[illegible]}-j_i+1}^{n_{sa}+j^{sa}-j_i-\text{[illegible]}}$$

$$\frac{(n_i \text{[illegible]} - 1)\text{[illegible]}}{(j_s-2)\text{[illegible]}(n_i-n_{is}\text{[illegible]}+1)!}.$$

$$\frac{(n_{is}-n_{i\text{[illegible]}}\text{[illegible]}1)!}{(j_{ik}-j_{\text{[illegible]}}\text{[illegible]}(n_{is}+j\text{[illegible]}n_{ik}-j_{ik})!}.$$

$$\frac{(n_{ik}-n_{s\text{[illegible]}}-\Bbbk_2-1)\text{[illegible]}}{(j^{sa}-j_{ik}-1)\text{[illegible]}(n_{ik}+j\text{[illegible]}-n_{sa}-j^{sa}-\Bbbk_2)!}.$$

$$\frac{(n_{sa}\text{[illegible]}n_s-\Bbbk_3\text{[illegible]}1)!}{(j_i\text{[illegible]}j^{sa}-1)!\cdot(n_{\text{[illegible]}}+j^{sa}-n_s-j_i-\Bbbk_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}.$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}.$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\text{[illegible]}_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}.$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \land$ [illegible] $\boldsymbol{l_i} \leq D + s - \boldsymbol{n} \land$

$1 \leq j_s \leq$ [illegible] $- j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa}$ [illegible] $j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \land \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \land \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n \land I = \Bbbk > 0 \land$

$j_{sa} < j_{sa}^{i} - 1 \land j_{sa}^{ik} < j_{sa} - 1 \land j_{sa}^{s} = j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\right\} \land$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa})}^{(\;)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\Bbbk_2} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\;)} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s-2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge s > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+j_{ik}-j_{sa}^{ik})}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_i}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s}+1 \leq \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\;)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - j_s - 1)!}{(j_s-2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)! \cdot (j_s-2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_i+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1} \sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\;)} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I \ = \ \mathbb{k} \ > \ 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z\colon z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{\mathbb{k}} \sum_{(j_s=2)}^{(j_{sa}^{s}-\mathbb{k}+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_s+j_{sa}^{ik}-j_{sa}^{s}-\mathbb{k}_1} \sum_{(j^{sa}=j_{sa}+1)}^{(j_{ik}+j_{sa}-j_{sa}^{ik}-\mathbb{k}_2)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=1}^{(\boldsymbol{l_s})}\sum_{(j_s=\cdots)}^{\cdots}$$

$$\sum_{j_{ik}=\cdots+1}^{\cdots}\sum_{(j^{sa}=j_{sa}+1)}^{(\cdots)}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\cdots+\mathbb{k}}^{\boldsymbol{n}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-\cdots+1)}^{(\cdots+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(\cdots-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!}.$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{\text{[illegible]}_{ik}-j_{sa}^{ik}+1)} \sum_{\text{[illegible]}=2)}$$

$$\sum_{\text{[illegible]}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\text{[illegible]}_{sa}-s)}^{(\quad)} \sum_{j_i=s+2}^{\text{[illegible]}-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\text{[illegible]}} \sum_{(n_{is}=\text{[illegible]}+\mathbb{k}-j_s+1)}^{(n_i\text{[illegible]}+1)} \sum_{\text{[illegible]}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\text{[illegible]}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\text{[illegible]}\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+\text{[illegible]}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!}.$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{\left(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s}\right)! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!}.$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}[illegible])}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j[illegible]}\ \sum_{(j^{sa}=j_i[illegible])}^{(\ \ )}\ \sum_{[illegible]s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}[illegible]\mathbb{k}-j[illegible])}^{(n_i-j_s+1)}\ \sum_{[illegible]=\boldsymbol{n}[illegible]+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}[illegible]}$$

$$\sum_{(n_{sa}[illegible]+\mathbb{k}_3-j^{s}[illegible])}^{(n_{ik}+j[illegible]j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}[illegible]-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-[illegible])!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{([illegible]_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j[illegible]j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i} \right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{\text{[illegible]}} = \sum_{\text{[illegible]}} \sum_{(j_s \text{[illegible]} - j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\text{[illegible]}} \sum_{\text{[illegible]}=j_{sa}+1)}^{\text{[illegible]})} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{\text{[illegible]}+\mathbb{k}}^{\text{[illegible]}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s\text{[illegible]}} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$$S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_s} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + 3 \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{(j^{sa} = j_{sa} + 2)}^{(\boldsymbol{l_{ik}} + j_{sa}^{ik} - s)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa} = \boldsymbol{l_{ik}} + j_{sa}^{ik} - s + 1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk \wedge z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_{ik}} + j_{sa}^{ik} - s)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \Bbbk}^{n} \sum_{(n_{is} = \boldsymbol{n} + \Bbbk - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \Bbbk_2 + \Bbbk_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \Bbbk_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \Bbbk_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \Bbbk_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-s)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}+1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j_{sa}^{i}\right\}$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-[illegible])!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-[illegible])!}{(\boldsymbol{l_s}-j_s)!\cdot([illegible]-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_s}[illegible]-s)!}{(j^{sa}+\boldsymbol{l_i}-[illegible])!\cdot(j_i+[illegible]-j^{sa}-s)!}\cdot$$

$$\frac{(D[illegible])!}{(D+[illegible]-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n}$ [illegible]

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq$ [illegible] $^{sa} + j_{sa}^{ik} - j_s \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i$ [illegible] $j_{sa} - s \wedge j^{s}$ [illegible] $s - j_{sa}$ [illegible] $\boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik}$ [illegible] $j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l}$ [illegible] $j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I =$ [illegible] $\mathbb{k} > 0 \wedge$

j [illegible] $< j_{sa}^{i} -$ [illegible] $j_{sa}^{ik} < j_s$ [illegible] $- 1 \wedge j_{sa}^{s} = j_{sa}^{i}$ [illegible] $- 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots,$ [illegible] $j_{sa}, \cdots,$ [illegible] j [illegible] $\} \wedge$

$s \geq 6 \wedge$ [illegible] $= s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge$ [illegible] $= \mathbb{k}_1 +$ [illegible] $+ \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{ik} - 1 \wedge j_{sa}^{ik} < j_i - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}^{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 3 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - \boldsymbol{n} - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{i} - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}^{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge I = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_s} + j_{sa} - 1)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{i}\text{[illegible]})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j\text{[illegible]}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n\text{[illegible]}-\mathbb{k}_3-1\text{[illegible]})!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+\text{[illegible]}a-n_s-j_i-\text{[illegible]})!}\cdot$$

$$\frac{(n_s\text{[illegible]}1)!}{\text{[illegible]}+j_i\text{[illegible]}-1\text{[illegible]}(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{\text{[illegible]}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}\text{[illegible]}\boldsymbol{l_{ik}}-j_{sa}\right)!}{\text{[illegible]}+\boldsymbol{l_{sa}}\text{[illegible]}j^{sa}-\boldsymbol{l_{ik}})!\text{[illegible]}\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\text{[illegible]}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{s\text{[illegible]}}\text{[illegible]}\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l_{ik}} - j_{sa}^{ik})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^{i} - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 𝕜_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 𝕜_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 𝕜_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - 𝕜_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$ [illegible]

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = 𝕜 > 0 \wedge$

$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j^{sa} - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, 𝕜_1, j_{sa}^{ik}, \cdots, 𝕜_2, j_{sa}^{sa}, \cdots, 𝕜_3, j_{sa}^{i}\right\} \wedge$

$s \geq 3 \wedge I = s + 𝕜 \wedge$

$𝕜_z: z = 3 \wedge 𝕜 = 𝕜_1 + 𝕜_2 + 𝕜_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{\left(j_{ik} - j_{sa}^{ik} + 1\right)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa} + j_{sa}^{ik} - j_{sa} - 1} \sum_{(j^{sa} = j_{sa} + 2)}^{(\boldsymbol{l_s} + j_{sa} - 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\mathbf{n}-\boldsymbol{l_i})!\cdot(\mathbf{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)}\sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\mathbf{n}-\boldsymbol{l_i})!\cdot(\mathbf{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j^{ik}_{sa}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l}_s+j_{sa}-1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l}_s-2)!}{(\boldsymbol{l}_s-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l}_{ik}-\boldsymbol{l}_s-j^{ik}_{sa}+1\right)!}{(j_s+\boldsymbol{l}_{ik}-j_{ik}-\boldsymbol{l}_s)!\cdot\left(j_{ik}-j_s-j^{ik}_{sa}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l}_i)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l}_i)!\cdot(\boldsymbol{n}-j_i)!}$$

$D \ge \boldsymbol{n} < n \wedge s-1 \le \boldsymbol{l}_i \le D+s-\boldsymbol{n} \wedge$

$1 \le j_s \le j_{ik}-j^{ik}_{sa}+1 \wedge j_s+j^{ik}_{sa}-1 \le j_{ik} \le j^{sa}+j^{ik}_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j^{ik}_{sa} \le j^{sa} \le j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l}_{ik}-j^{ik}_{sa}+1=\boldsymbol{l}_s \wedge \boldsymbol{l}_{sa}+j^{ik}_{sa}-j_{sa}=\boldsymbol{l}_{ik} \wedge \boldsymbol{l}_i+j_{sa}-s > \boldsymbol{l}_{sa} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j^{i}_{sa}-1 \wedge j^{ik}_{sa} < j_{sa}-1 \wedge j^{s}_{sa}=j^{ik}_{sa}-1 \wedge$

$\boldsymbol{s}\colon \left\{j^{s}_{sa},\mathbb{k}_1,j^{ik}_{sa},\cdots,\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j^{i}_{sa}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z : z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}} $$

$$ \sum_{n_i = \boldsymbol{n} + \Bbbk}^{n} \sum_{(n_{is} = \boldsymbol{n} + \Bbbk - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \Bbbk_2 + \Bbbk_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \Bbbk_1} \sum_{(n_{sa} = \boldsymbol{n} + \Bbbk_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \Bbbk_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \Bbbk_3} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot $$

$$ \frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot $$

$$ \frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} $$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i} \right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\text{[illegible]}} \sum_{(j_s = j_{ik} \text{[illegible]} + 1)}^{\text{[illegible]})}$$

$$\sum_{j_{ik} = \text{[illegible]} + 1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa} = \text{[illegible]} + j_{sa} - j_{sa}^{\text{[illegible]}})}^{(\ \ )} \sum_{\text{[illegible]} - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{\text{[illegible]} = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \text{[illegible]} + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + \text{[illegible]} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{[illegible]} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{j_{ik}=[illegible]j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}[illegible]} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{([illegible]\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{[illegible]} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I\;=\;\Bbbk\;>\;0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\Bbbk_1,j_{sa}^{ik},\cdots,\Bbbk_2,j_{sa},\cdots,\Bbbk_3,j_{sa}^{i}\right\}$

$s\geq 6\wedge\boldsymbol{s}=s+\Bbbk\wedge$

$\Bbbk_z\colon z=3\wedge\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3$

$${}_{fz}S_{j_s\;,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-\text{[illegible]})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(\text{[illegible]}-\boldsymbol{l_i})!}{(D+\text{[illegible]}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\text{[illegible]}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{\text{[illegible]}}\leq j^{sa}+j_{sa}\text{[illegible]}j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{\text{[illegible]}}\leq j_i\leq\text{[illegible]}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\text{[illegible]}\wedge\boldsymbol{l_i}+j_{sa}-\text{[illegible]}\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I\ =\ \Bbbk\ >\ 0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-\text{[illegible]}\wedge j_{sa}^{s}=j_{sa}\text{[illegible]}1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\Bbbk_1,j_{sa}^{ik},\cdots,\Bbbk_2,j_{sa},\cdots,\text{[illegible]}j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\text{[illegible]}\wedge$

$\Bbbk_{\text{[illegible]}}:z=3\wedge\text{[illegible]}=\Bbbk_1+\text{[illegible]}+\Bbbk_3\Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - \boldsymbol{n} - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - 1)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{ik}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{sa}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa}^{i} - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 3 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} < j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}} $$

$$ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j_i+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} $$

$$ \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot $$

$$ \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot $$

$$ \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot $$

$$ \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot $$

$$ \frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot $$

$$ \frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot $$

$$ \frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot $$

$$ \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+ $$

$$ \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})} $$

$$ \sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}} $$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 0 \wedge \boldsymbol{l_i} \leq D + \boldsymbol{l_s} - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{i} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}\ [illegible])}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\boldsymbol{s}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{\cdots} \sum_{(\cdots=2)}^{(\cdots_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{\cdots+j_{sa}-j_{sa}^{ik}+\cdots}^{(\boldsymbol{l}\cdots)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\cdots}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n\cdots} \sum_{(n_{is}=\cdots+\mathbb{k}-j_s+1)}^{(n_i-\cdots 1)} \sum_{\cdots=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\cdots-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\cdots\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+\cdots-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2 \cdots)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa} \cdots)}^{(\boldsymbol{l_{sa}})} \sum_{\cdots j^{sa} \cdots - j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is} \cdots + \mathbb{k} \cdots)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n} \cdots + \mathbb{k}_3 - j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k} \cdots}$$

$$\sum_{(n_{s} \cdots \boldsymbol{n}+\mathbb{k}_3-j^{s} \cdots)}^{(n_{ik}+ \cdots j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa} \cdots j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - \cdots)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(\cdots_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\cdots j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i} \right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$f z [illegible] , j_{ik}, j^{sa}, j_i [illegible] = \sum_{[illegible]k=1} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{[illegible] = j_{sa}^{ik} + 1}^{\boldsymbol{l_s} [illegible] _{a}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1)}^{[illegible] a)} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{[illegible] i = \boldsymbol{n} + \mathbb{k}}^{[illegible]} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+[illegible]\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-[illegible]-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}[illegible])!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-[illegible]-s)!}\cdot$$

$$\frac{(D[illegible]\boldsymbol{l_i})!}{([illegible]+j_i[illegible]\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{[illegible]}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+[illegible]}^{\boldsymbol{l_{ik}}}\sum_{[illegible]=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{[illegible]\boldsymbol{n}+\mathbb{k}}^{[illegible]}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{[illegible]}^{[illegible]}\ \sum_{[illegible]=2)}^{\left(j_{ik}-j_{sa}^{ik}+1\right)}$$

$$\sum_{[illegible]=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{\left(j^{sa}=j_{i[illegible]}j_{sa}-j_{sa}^{ik}\right)}^{(\ \ )}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i[illegible]+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j[illegible])}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-\text{[illegible]})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})\text{[illegible]}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\text{[illegible]}\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{\text{[illegible]}}\ \sum_{(j_s=\text{[illegible]}}^{(\text{[illegible]}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=\text{[illegible]}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-\text{[illegible]}}\ \sum_{(j^{sa}=\text{[illegible]}j_{sa}-j_{sa}^{ik})}^{\text{[illegible]})}\ \sum_{j_i=j\text{[illegible]}+s-j_{sa}}^{\text{[illegible]}}$$

$$\sum_{n_i=\text{[illegible]}\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\text{[illegible]}+1)}^{(\text{[illegible]}j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\text{[illegible]}n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(\text{[illegible]}_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!}.$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$\text{[illegible]}\, S_{\text{[illegible]}\,ik, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{sa}} - j_{sa} + 1)}$$

$$\sum_{\text{[illegible]}\, j_s + j_{sa}^{ik} - 1}^{\text{[illegible]}} \sum_{\left(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}\right)}^{(\quad)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \text{[illegible]})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s \text{[illegible]} j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{\text{[illegible]} - 1)!}{(n_s + \text{[illegible]} - \boldsymbol{n} - 1\text{[illegible]} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} \text{[illegible]})! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + \text{[illegible]} - \boldsymbol{l_{sa}} \text{[illegible]}}{(j^{sa} + \boldsymbol{l_i} \text{[illegible]} j_i - \boldsymbol{l_{sa}} \text{[illegible]} (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{\text{[illegible]} - \boldsymbol{l_i})!}{(D \text{[illegible]} j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D$ [illegible] $s -$ [illegible]

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s$ [illegible] $j_{sa}^{ik} - 1 \leq j_{ik}$ [illegible] $j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} -$ [illegible] $\land j^{sa} + s$ [illegible] $j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}} -$ [illegible] $+ 1 = \boldsymbol{l_s} \land$ [illegible] $+ j_{sa}^{ik} - j_{sa} >$ [illegible] $\boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n \land I$ [illegible] $\mathbb{k} > 0$ [illegible]

$j_{sa} <$ [illegible] $- 1 \land j_{sa}^{ik} <$ [illegible] $- 1 \land j_{sa} = j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1,$ [illegible] $\cdots, \mathbb{k}_2, j_s$ [illegible] $\cdots, \mathbb{k}_3, j_{sa}^{i}\} \land$

$s \geq$ [illegible] $\boldsymbol{s} = s +$ [illegible]

$\mathbb{k}_z: z = 3$ [illegible] $= \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 0 \wedge \boldsymbol{l_i} \leq D + \boldsymbol{l_s} - \boldsymbol{n} \wedge$

$1 \leq j_s < j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} < j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{i} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}\ \sum_{(j_s=2)}^{\left(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\right)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1}\ \sum_{(j_s=2)}^{\left(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\right)}
$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge I > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq \boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})} $$

$$ \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}} $$

$$ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot $$

$$ \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot $$

$$ \frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} $$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k} \sum_{(j_s=2)}^{(\boldsymbol{l_s})} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1} \sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i} \right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I\;=\;\Bbbk\;>\;0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\Bbbk_1,j_{sa}^{ik},\cdots,\Bbbk_2,j_{sa},\cdots,\Bbbk_3,j_{sa}^{i}\right\}$

$s\geq 6\wedge\boldsymbol{s}=s+\Bbbk\wedge$

$\Bbbk_z\!:z=3\wedge\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3$

$${}_{fz}S_{j_s\;,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\;\sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\boldsymbol{l_{sa}})}\;\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\;\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\;\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\;\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I\ =\ \mathbb{k}\ >\ 0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \text{[illegible]})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s \text{[illegible]} j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{\text{[illegible]} - 1)!}{(n_s + \text{[illegible]} - \boldsymbol{n} - 1 \text{[illegible]} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} \text{[illegible]})! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} \text{[illegible]} - j_{sa}^{ik} + \text{[illegible]})!}{(j_s + \boldsymbol{l_{ik}} \text{[illegible]} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} \text{[illegible]} - \boldsymbol{l_{sa}} \text{[illegible]} s)!}{(\text{[illegible]} + \boldsymbol{l_i} - j_i - \boldsymbol{l_s} \text{[illegible]})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_s=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z: z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\mathbf{n}-\boldsymbol{l_i})!\cdot(\mathbf{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_i}-s+1>\boldsymbol{l_s}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+\text{[illegible]})}^{(\ )}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s-\text{[illegible]})} \sum_{(\text{[illegible]}+1)} \sum_{\text{[illegible]}s+2}^{\text{[illegible]}+j_{sa}-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{\text{[illegible]}}+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\text{[illegible]}+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}}
$$

$$
\sum_{(\text{[illegible]}=\boldsymbol{n}+\mathbb{k}_3-\text{[illegible]}1)}^{(n_{ik}\text{[illegible]}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{\text{[illegible]}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \text{[illegible]})! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(\text{[illegible]} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - \text{[illegible]}_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\text{[illegible]} - \text{[illegible]}_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_{sa}}+j_{sa}-s\text{[illegible]}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2\text{[illegible]}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j\text{[illegible]}1)}^{(n_{ik}+j_{ik}-j^{sa}\text{[illegible]})} \sum_{n_s=\boldsymbol{n}-j_i+\text{[illegible]}}^{\text{[illegible]}+j^{s}\text{[illegible]}j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is}\text{[illegible]}1)!}{(j_s\text{[illegible]}2)! \cdot (\text{[illegible]}n_{is}\text{[illegible]}j_s + 1)!} \cdot$$

$$\frac{\text{[illegible]} - n_{ik}\text{[illegible]}\mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)!\text{[illegible]}(n_{is} + j_s\text{[illegible]}n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{s}\text{[illegible]} - \mathbb{k}_2 - 1)!}{\text{[illegible]}^{sa} - j_{ik}\text{[illegible]}1)! \cdot (n_{ik}\text{[illegible]}j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - \text{[illegible]}^{a} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} <$ [illegible] $\wedge\, \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \land j_{sa}^{ik} < j_{sa} - 1 \land j_{sa}^{s} < j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \land$

$s \geq 7 \land \boldsymbol{s} = s + \mathbb{k} \land$

$\mathbb{k}_z: z = 3 \land \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=\text{[illegible]}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i\text{[illegible]}-s-1)} \sum_{(\text{[illegible]}=j_{sa}+1)}^{\boldsymbol{l_i}\text{[illegible]}j_{sa}^{ik}-s} \sum_{j_i=\text{[illegible]}}
$$

$$
\sum_{n_i=\boldsymbol{n}\text{[illegible]}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\text{[illegible]}+1)}^{\text{[illegible]}+1)} \sum_{n_{ik}=\boldsymbol{n}\text{[illegible]}-j_{ik}+1}^{\text{[illegible]}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}\text{[illegible]}_3-j^{sa}+1)}^{\text{[illegible]}_{ik}+j_{ik}-\text{[illegible]}\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-\dots}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+j^{sa}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s}^{\boldsymbol{l_i}+j_{sa}^{ik}-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}+1}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{[illegible]} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i-[illegible]-s-1)} \sum_{j_i=[illegible]}^{\boldsymbol{l}_i[illegible]j_{sa}^{ik}-s}
$$

$$
\sum_{n_i=\boldsymbol{n}[illegible]}^{\boldsymbol{n}} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk[illegible]+1)}^{([illegible]+1)} \sum_{n_{ik}=\boldsymbol{n}[illegible]-j_{ik}+1}^{[illegible]+j_s-j_{ik}-\Bbbk_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=\text{[illegible]}+j_{sa}^{ik}-s+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s\text{[illegible]})}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\text{[illegible]}+1}^{n_{is}+j_s-\text{[illegible]}-\Bbbk_1}$$

$$\sum_{(n_{sa}\text{[illegible]}+\Bbbk_3-j^{\text{[illegible]}})}^{(n_{ik}+j_{ik}-j^{sa}-\text{[illegible]}}\sum_{\text{[illegible]}-j_i+1}^{n_{sa}+j^{sa}-j_i-\text{[illegible]}}$$

$$\frac{(\text{[illegible]}-n_{is}-1)!}{(\text{[illegible]}-2)!\cdot(\text{[illegible]}-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\text{[illegible]}-\Bbbk_1-1)!}{(j_{ik}-\text{[illegible]}-1)!\cdot(n\text{[illegible]}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j\text{[illegible]}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(\text{[illegible]}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=s+1}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$> \boldsymbol{n} \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I \,=\, \Bbbk \,>\, 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}\colon \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z\colon z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s\;,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)} \sum_{j_{ik}=\text{[illegible]}^{ik}-j_{sa}}^{(j_i+j_{sa}-s-\text{[illegible]})} \sum_{(j^{s\text{[illegible]}}{}_{a}+1)}^{\text{[illegible]}s-1} \sum_{j_i=s+2}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n\text{[illegible]}} \sum_{(n_{is}\text{[illegible]}+\Bbbk-j_s+1\text{[illegible]})}^{(n_i\text{[illegible]}+1)} \sum_{\text{[illegible]}_k=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{\text{[illegible]}-\Bbbk_1} \sum_{(n_{sa}=\text{[illegible]}\Bbbk_3-j^{sa}+1)}^{(n_{ik}+\text{[illegible]}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=\boldsymbol{l_s}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \land j_{sa}^{ik} < j_{sa} - 1 \land j_{sa}^{s} < j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}\colon \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \land$

$s \geq 7 \land \boldsymbol{s} = s + \mathbb{k} \land$

$\mathbb{k}_z\colon z = 3 \land \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=\text{[illegible]}-j_{sa}^{ik}+1)}^{(\ )} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\text{[illegible]}2}^{\text{[illegible]}+s-1} $$

$$ \sum_{n_i=\boldsymbol{n}\text{[illegible]}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\text{[illegible]}+1)}^{\text{[illegible]}+1)} \sum_{n_{ik}=\boldsymbol{n}+\text{[illegible]}-j_{ik}+1}^{\text{[illegible]}+j_s-j_{ik}-\mathbb{k}_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}\text{[illegible]}_3-j^{sa}+1)}^{\text{[illegible]}_{ik}+j_{ik}-\text{[illegible]}\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot $$

$$ \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot $$

$$ \frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} + $$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l}\ldots}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2\ldots-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j\ldots+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{\ldots+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\ldots > \boldsymbol{n} \ldots \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{ j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i} \} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z : z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\text{[illegible]}} \sum_{\text{[illegible]} j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=\text{[illegible]} j_{sa}}^{\text{[illegible]}} \sum_{(j^{sa}=\text{[illegible]} j_{sa}-s)}^{(\text{[illegible]})} \sum_{j_i=s+2}^{\text{[illegible]} s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{\text{[illegible]}} \sum_{(n_{is}=\text{[illegible]}+\Bbbk-j_s+1\text{[illegible]})}^{(n_i \text{[illegible]}+1)} \sum_{\text{[illegible]}_k=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{\text{[illegible]}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\text{[illegible]}\Bbbk_3-j^{sa}+1)}^{(n_{ik}+\text{[illegible]}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(\text{[illegible]}k - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i} \right\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=\dots-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\dots+j_{sa}-s-1)} \sum_{j_i=\dots 2}^{\dots+s-1}
$$

$$
\sum_{n_i=\boldsymbol{n}\dots}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\dots+1)}^{(\dots+1)} \sum_{n_{ik}=\boldsymbol{n}+\dots-j_{ik}+1}^{\dots+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}\dots_3-j^{sa}+1)}^{(\dots_{k}+j_{ik}-j\dots\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{sa}+j_{ik}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\;)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\;)} \sum_{j_i=s}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j^{sa}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \land$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \land \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \land \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i} \right\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{[illegible]} \sum_{[illegible]=2)}^{[illegible]_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}[illegible]}^{[illegible]} \sum_{[illegible]^{ik}-j_{sa}}^{} \sum_{(j^{s}[illegible]_{a}+1)}^{(j_i+j_{sa}-s-[illegible])} \sum_{j_i=s+2}^{[illegible]-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n[illegible]} \sum_{(n_{is}[illegible]+\mathbb{k}-j_s+1[illegible]}^{(n_i[illegible]+1)} \sum_{[illegible]_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{[illegible]+[illegible]-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=[illegible]\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+[illegible]-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{([illegible]_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=s}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \land j_{sa}^{ik} < j_{sa} - 1 \land j_{sa}^{s} < j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i} \right\} \land$

$s \geq 7 \land \boldsymbol{s} = s + \Bbbk \land$

$\Bbbk_z: z = 3 \land \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}-1)} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=j_{sa}^{i}+2}^{n+s-1} $$

$$ \sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot $$

$$ \frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot $$

$$ \frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot $$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_i+j_{sa}-j_{ik})}^{(\ )}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+j_{sa}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s+j^{sa}-j_{sa}}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\mathbf{n}+\Bbbk}^{n} \sum_{(n_{is}=\mathbf{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\mathbf{n}-\boldsymbol{l_i})!\cdot(\mathbf{n}-j_i)!}$$

$(D > \mathbf{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \le D+s-\mathbf{n} \wedge$

$1 \le j_s \le j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \le j_{ik} \le j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \le j^{sa} \le j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \le j_i \le \mathbf{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$f_Z(\ldots, j_{ik}, j^{sa}, j_i) = \sum_{\mathbb{k}=1}^{\ldots} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_s^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\ldots} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\text{[illegible]}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)\text{[illegible]}}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-\text{[illegible]}^{sa}-s)!}\cdot$$

$$\frac{(D\ \text{[illegible]})!}{(D+j_i\ \text{[illegible]}\ \boldsymbol{n}-\boldsymbol{l_i})!\cdot(\text{[illegible]}\ j_i)!}+$$

$$\text{[illegible]}\sum_{\text{[illegible]}=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}\text{[illegible]}}^{j^{\text{[illegible]}}\text{[illegible]}_{a}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ \ )}\ \sum_{j_i=s+2}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i\text{[illegible]}+\mathbb{k}}^{\boldsymbol{n}}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j\text{[illegible]})}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - \text{[illegible]})!}$$

$$\sum_{k=1} \sum_{\text{[illegible]}=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=\text{[illegible]}} \sum_{(j^{sa}=\text{[illegible]}-s)}^{(\ )} \sum_{j_i=s+2}^{\text{[illegible]}-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\text{[illegible]}} \sum_{(n_{is}=\text{[illegible]}+\mathbb{k}-j_s+1)}^{(n_i-\text{[illegible]}1)} \sum_{\text{[illegible]}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\text{[illegible]}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\text{[illegible]}\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+\text{[illegible]}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\text{[illegible]}_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I \ = \ \mathbb{k} \ > \ 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z\colon z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_{ik}} + j_{sa}^{ik} - s)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\Bbbk>0\wedge$

$j_{sa}^{s}<j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\Bbbk_1,j_{sa}^{ik},\cdots,\Bbbk_2,j_{sa},\cdots,\Bbbk_3,j_{sa}^{i}\}\wedge$

$s\geq 7\wedge S=s+\Bbbk\wedge$

$\Bbbk_z:z=3\wedge\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3\Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\mathbf{n}-\boldsymbol{l_i})!\cdot(\mathbf{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{\left(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1\right)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\ge\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\le D+s-\boldsymbol{n}\wedge$

$1\le j_s\le j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\le j_i\le\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\ge\boldsymbol{n}<n\wedge I=\Bbbk>0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}^{i}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\Bbbk_1,j_{sa}^{ik},\cdots,\Bbbk_2,j_{sa},\cdots,\Bbbk_3,j_{sa}^{i}\}\wedge$

$s\ge4\wedge\boldsymbol{s}=s+\Bbbk\wedge$

$\Bbbk_z:z=3\wedge\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3\Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq$ [illegible] $+ s - \boldsymbol{n} \wedge$ [illegible]

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I$ [illegible] $\mathbb{k} > 0 \wedge$

$j_{sa} <$ [illegible] $- 1 \wedge j_{sa}^{ik} <$ [illegible] $- 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j^{sa}_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq$ [illegible] $= s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_s} + j_{sa} - 1)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\mathbf{n}+\Bbbk}^{n} \sum_{(n_{is}=\mathbf{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\mathbf{l_s}-2)!}{(\mathbf{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\mathbf{l_i}+j_{sa}-\mathbf{l_{sa}}-s)!}{(j^{sa}+\mathbf{l_i}-j_i-\mathbf{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\mathbf{l_i})!}{(D+j_i-\mathbf{n}-\mathbf{l_i})!\cdot(\mathbf{n}-j_i)!}$$

$D \geq \mathbf{n} < n \wedge \mathbf{l_s} > 1 \wedge \mathbf{l_i} \leq D + s - \mathbf{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$

$\mathbf{l_{ik}} - j_{sa}^{ik} + 1 = \mathbf{l_s} \wedge \mathbf{l_{sa}} + j_{sa}^{ik} - j_{sa} > \mathbf{l_{ik}} \wedge \mathbf{l_i} + j_{sa} - s = \mathbf{l_{sa}} \wedge$

$D \geq \mathbf{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa}^{i} > j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}} $$

$$ \sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+j^{sa}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3} $$

$$ \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot $$

$$ \frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot $$

$$ \frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot $$

$$ \frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot $$

$$ \frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot $$

$$ \frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot $$

$$ \frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot $$

$$ \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+ $$

$$ \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}} $$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 0 \wedge \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \wedge$

$1 \leq j_s < j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} < j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\;,j_{ik},j^{sa},j_i}=\sum_{k=1}\;\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\;\sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)}\;\sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\;\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\;\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\;\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1}\;\sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\;\sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\;\sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 0 \wedge \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\;,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i-n_{is}-\Bbbk-1)!}{(j_s-2)!\cdot(n_i-n_{is}-\Bbbk-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}
$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\mathbf{n}-\boldsymbol{l_i})!\cdot(\mathbf{n}-j_i)!}$$

$D \geq \mathbf{n} < n \wedge \boldsymbol{l_s} > 0 \wedge \boldsymbol{l_i} \leq D + j_i - \mathbf{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}\ \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\land\boldsymbol{l_s}>0\land\boldsymbol{l_i}\leq D+j_i-\boldsymbol{n}\land$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\land j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\land$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\land j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\land$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\land\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\land\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\land$

$D\geq\boldsymbol{n}<n\land I=\Bbbk>0\land$

$j_{sa}<j_{sa}^{i}-1\land j_{sa}^{ik}<j_{sa}-1\land j_{sa}^{s}<j_{sa}^{ik}-1\land$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\Bbbk_1,j_{sa}^{ik},\cdots,\Bbbk_2,j_{sa},\cdots,\Bbbk_3,j_{sa}^{i}\right\}\land$

$s\geq 7\land\boldsymbol{s}=s+\Bbbk\land$

$\Bbbk_z:z=3\land\Bbbk=\Bbbk_1+\Bbbk_2+\Bbbk_3\Rightarrow$

$$
{}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\mathbf{n}-\boldsymbol{l_i})!\cdot(\mathbf{n}-j_i)!}+
$$

$$
\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{\text{[illegible]}} \sum_{\text{[illegible]}=2)}^{\text{[illegible]}_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=\text{[illegible]}}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\text{[illegible]}^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}\text{[illegible]}-1)} \sum_{\text{[illegible]}^{sa}+s-j_{sa}+1}^{\text{[illegible]}} $$

$$ \sum_{n_i=\boldsymbol{n}+\Bbbk}^{\text{[illegible]}} \sum_{(n_{is}\text{[illegible]}+\Bbbk-j_s+1)}^{(n_i\text{[illegible]}1)} \sum_{\text{[illegible]}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{\text{[illegible]}-\Bbbk_1} $$

$$ \sum_{(n_{sa}\text{[illegible]}\Bbbk_3-j^{sa}+1)}^{(n_{ik}+\text{[illegible]}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{\text{[illegible]}_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot $$

$$ \frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot $$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{\mathbb{k}=1}^{\cdots} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\cdots+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\ \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}-1}\ \sum_{(j^{sa}=j_{sa}\text{[illegible]})}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{\text{[illegible]}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}\text{[illegible]})}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}\text{[illegible]}+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\text{[illegible]}}$$

$$\sum_{(n_s\text{[illegible]}\boldsymbol{n}+\mathbb{k}_3-j^{s}\text{[illegible]})}^{(n_{ik}+\text{[illegible]}j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}\text{[illegible]}j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\text{[illegible]})!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-\text{[illegible]}_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j\text{[illegible]}j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+2)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\Bbbk}^{n} \sum_{(n_{is}=\mathbf{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\mathbf{n}-\boldsymbol{l_i})!\cdot(\mathbf{n}-j_i)!}$$

$D \geq \mathbf{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \mathbf{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \mathbf{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1} \sum_{n_i=\boldsymbol{n}+1}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}
$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \land \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \land \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n \land I = \mathbb{k} > 0 \land$

$j_{sa} < j_{sa}^{i} - 1 \land j_{sa}^{ik} < j_{sa} - 1 \land j_{sa}^{s} < j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \land$

$s \geq 7 \land \boldsymbol{s} = s + \mathbb{k} \land$

$\mathbb{k}_z: z = 3 \land \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{[illegible]} = \sum_{[illegible]} \sum_{(j_s=[illegible]-j_{sa}^{ik}+1)}^{([illegible])}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=[illegible]+j_{sa}-j_{sa}^{ik})}^{([illegible])} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{[illegible]+\mathbb{k}}^{[illegible]} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s[illegible])} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}<j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j_{sa}^{i}\}\wedge$

$s\geq 7\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=3\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$$S_{j_s,j_{ik},\dots,j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} > 1 \land \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \land$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \land \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \land \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n \land I = \Bbbk > 0 \land$

$j_{sa} < j_{sa}^{i} - 1 \land j_{sa}^{ik} < j_{sa} - 1 \land j_{sa}^{s} < j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\right\} \land$

$s \geq 7 \land \boldsymbol{s} = s + \Bbbk \land$

$\Bbbk, z = 3 \land \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{\left(j_s = j_{ik} - j_{sa}^{ik} + 1\right)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}}} \sum_{\left(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1\right)}^{(\boldsymbol{l_{sa}})} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \Bbbk}^{n} \sum_{(n_{is} = \boldsymbol{n} + \Bbbk - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \Bbbk_2 + \Bbbk_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \Bbbk_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \Bbbk_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \Bbbk_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}-\boldsymbol{l_{ik}}-j_{sa}^{ik})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \ge \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \le D + s - \boldsymbol{n} \wedge$

$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} \cdots \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \Bbbk > 0 \cdots$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \cdots$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \ge 7 \wedge \boldsymbol{s} = s - \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\;)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_s} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$\boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s-2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} + s - 1 \leq \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$
{}_{fz}S_{j_s\;,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l}_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} - 1 \leq \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z : z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$$

$$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i} \right\} \wedge$$

$$s \geq 7 \wedge \boldsymbol{s} = s + \Bbbk \wedge$$

$$\Bbbk_z : z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s = \text{[illegible]})}^{(j_i \text{[illegible]} j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = \text{[illegible]} + 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - 1} \sum_{(j^{sa} = \text{[illegible]} j_{sa} - j_{sa}^{ik})}^{(\text{[illegible]})} \sum_{\text{[illegible]} j_{sa} + 1}^{\boldsymbol{l_i}}$$

$$\sum_{\text{[illegible]} \boldsymbol{n} + \Bbbk}^{n} \sum_{(n_{is} = \boldsymbol{n} + \Bbbk \text{[illegible]} + 1)}^{(\text{[illegible]} - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \Bbbk_2 + \Bbbk_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \Bbbk_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + \Bbbk_3 - j^{sa} + 1)}^{(n_{ik} + \text{[illegible]} - j^{sa} - \Bbbk_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-\Bbbk-1)!}{(j_s-2)!\cdot(n_i-n_{is}-\Bbbk-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I \ = \ \mathbb{k} \ > \ 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i} \right\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{\text{[illegible]}} \sum_{\text{[illegible]}=2)}^{\text{[illegible]}_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{\text{[illegible]}+j_{sa}-j_{sa}^{ik}+\text{[illegible]}}^{(\boldsymbol{l}_{\text{[illegible]}}} \sum_{\text{[illegible]}=j^{sa}+s-j_{sa}}^{\text{[illegible]}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n\text{[illegible]}} \sum_{(n_{is}\text{[illegible]}+\mathbb{k}-j_s+1)}^{(n_i-\text{[illegible]}1)} \sum_{\text{[illegible]}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\text{[illegible]}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}\text{[illegible]}\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+\text{[illegible]}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\text{[illegible]}_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{[illegible]}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+j_{sa}^{ik}-j_{sa}}^{[illegible]}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\boldsymbol{n}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$(D > \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$f z[\text{illegible}], j_{ik}, j^{sa}, j_{[\text{illegible}]}) = \sum_{[\text{illegible}]k=1}^{[\text{illegible}]} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{[\text{illegible}]=j_{sa}^{ik}+1}^{\boldsymbol{l_s}[\text{illegible}]_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{([\text{illegible}]a)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{[\text{illegible}]i=\boldsymbol{n}+\mathbb{k}}^{[\text{illegible}]} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{\ldots}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\ldots}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\ldots}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\text{[illegible]}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s\text{[illegible]}}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-\text{[illegible]}^{sa}-s)!}$$

$$\frac{(D\text{[illegible]})!}{(D+j_i\text{[illegible]}\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\text{[illegible]}_i)!}+$$

$$\text{[illegible]}\sum^{(j_{ik}-j_{sa}^{ik}+1)}_{\text{[illegible]}=2)}$$

$$\sum_{\text{[illegible]}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\;\sum_{(j^{sa}=j_i\text{[illegible]}j_{sa}-j_{sa}^{ik})}^{(\;\;)}\;\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i\text{[illegible]}+\mathbb{k}}^{n}\;\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j\text{[illegible]})}\;\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\;\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-\text{[illegible]})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}\ \sum_{(j_s=\text{[illegible]})}^{(\text{[illegible]}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=\text{[illegible]}+2}^{\boldsymbol{l_s}+j_{sa}^{ik}-\text{[illegible]}}\ \sum_{(j^{sa}=\text{[illegible]}j_{sa}-j_{sa}^{ik})}^{(\text{[illegible]})}\ \sum_{j_i=\text{[illegible]}+s-j_{sa}}$$

$$\sum_{n_i=\text{[illegible]}\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-\text{[illegible]}+1)}^{(\text{[illegible]}+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\text{[illegible]}_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(\text{[illegible]}_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\land\boldsymbol{l_s}>1\land\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\land$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\land j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\land$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\land j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\land$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\land\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\land\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\land$

$D\geq\boldsymbol{n}<n\land I=\mathbb{k}>0\land$

$j_{sa}<j_{sa}^{i}-1\land j_{sa}^{ik}<j_{sa}-1\land j_{sa}^{s}<j_{sa}^{ik}-1\land$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,\mathbb{k}_3,j_{sa}^{i}\}\land$

$s\geq7\land\boldsymbol{s}=s+\mathbb{k}\land$

$\mathbb{k}_z:z=3\land\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3\Rightarrow$

$$S_{\ldots j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_{sa}}-j_{sa}+1)}$$

$$\sum_{\ldots j_s+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{l_i} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa}^{i} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 0 \wedge \boldsymbol{l_i} \leq D + j_i - \boldsymbol{n} \wedge$

$1 \leq j_s < j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} < j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\right\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot
$$

$$
\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \ \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{\boldsymbol{l_i}} \ \sum_{j_i=j^{sa}+s-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \land s > 1 \land \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \land$

$1 \leq j_s \leq \boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \land$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \land \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \land \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n \land I = \mathbb{k} > 0 \land$

$j_{sa} < j_{sa}^{i} - 1 \land j_{sa}^{ik} < j_{sa} - 1 \land j_{sa}^{s} < j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \land$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \cdots, \Bbbk_2, j_{sa}, \cdots, \Bbbk_3, j_{sa}^{i}\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{D} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \Bbbk_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \Bbbk_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \Bbbk_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \Bbbk_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$S_{j_s, j_{ik}, j^{\ }, j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{\ =j_s+j_{sa}^{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I \ = \ \mathbb{k} \ > \ 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\right\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z\colon z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{l_i} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\text{[illegible]})!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s\text{[illegible]}j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{\text{[illegible]}-1)!}{(n_s+\text{[illegible]}-\boldsymbol{n}-1\text{[illegible]}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}\text{[illegible]})!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}\text{[illegible]}-j_{sa}^{ik}+\text{[illegible]})!}{(j_s+\boldsymbol{l_{ik}}\text{[illegible]}_{ik}-\boldsymbol{l_s})\text{[illegible]}(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}\text{[illegible]}_a-\boldsymbol{l_{sa}}\text{[illegible]}s)!}{(\text{[illegible]}+\boldsymbol{l_i}-j_i-\boldsymbol{l_s}\text{[illegible]})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\;\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\;)}\;\sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\;\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\;\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\;\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l_s} - 2)!}{(\mathbf{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l_i} + j_{sa} - \mathbf{l_{sa}} - s)!}{(j^{sa} + \mathbf{l_i} - j_i - \mathbf{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l_i})!}{(D + j_i - \mathbf{n} - \mathbf{l_i})! \cdot (\mathbf{n} - j_i)!}$$

$D \geq \mathbf{n} < n \land \mathbf{l_s} > 1 \land \mathbf{l_i} \leq D + s - \mathbf{n} \land$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \land j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \land j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \land$

$\mathbf{l_{ik}} - j_{sa}^{ik} + 1 > \mathbf{l_s} \land \mathbf{l_{sa}} + j_{sa}^{ik} - j_{sa} = \mathbf{l_{ik}} \land \mathbf{l_i} + j_{sa} - s = \mathbf{l_{sa}} \land$

$D \geq \mathbf{n} < n \land I = \mathbb{k} > 0 \land$

$j_{sa} < j_{sa}^{i} - 1 \land j_{sa}^{ik} < j_{sa} - 1 \land j_{sa}^{s} < j_{sa}^{ik} - 1 \land$

$\mathbf{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \land$

$s \geq 7 \land \mathbf{s} = s + \mathbb{k} \land$

$\mathbb{k}_z: z = 3 \land \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$

$$_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\mathbf{l_s})} \sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\mathbf{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\mathbf{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{ik})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1\right)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - s + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D > \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, \mathbb{k}_3, j_{sa}^{i}\} \wedge$

$s \geq 7 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\Bbbk_z: z = 3 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 + \Bbbk_3 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}
\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2+\Bbbk_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}
\sum_{(n_{sa}=\boldsymbol{n}+\Bbbk_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\Bbbk_3}
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}\cdot
\frac{(n_{ik}-n_{sa}-\Bbbk_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot
\frac{(n_{sa}-n_s-\Bbbk_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\Bbbk_3)!}\cdot
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

DİZİN

B

ilk simetrik olasılık, 2.3.2.1.2.1.2.1/4

ilk düzgün simetrik olasılık, 2.3.2.2.2.1.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.1.3.1/4

ilk düzgün simetrik olasılık, 2.3.2.2.2.1.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.2.1.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.2.2.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.2.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.2.2.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.2.2.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.2.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.2.3.1/4

ilk düzgün simetrik olasılık, 2.3.2.2.2.2.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.2.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.4.1.1/4

ilk düzgün simetrik olasılık, 2.3.2.2.2.4.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.4.2.1/4

ilk düzgün simetrik olasılık, 2.3.2.2.2.4.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.4.3.1/4

ilk düzgün simetrik olasılık, 2.3.2.2.2.4.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.6.1.1/4

ilk düzgün simetrik olasılık, 2.3.2.2.2.6.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.6.2.1/4

ilk düzgün simetrik olasılık, 2.3.2.2.2.6.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.4.1.1.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.4.1.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.4.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin herhangi iki durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.4.1.2.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.4.1.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.4.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin herhangi iki durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.4.1.3.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.4.1.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.4.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.4.1.1.1/701-702

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.4.1.2.1/701-702

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.4.1.3.1/701-702

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.5.1.1.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.5.1.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.1.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.5.1.2.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.5.1.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.1.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.5.1.3.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.5.1.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.1.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.5.2.1.1/6-7
ilk düzgün simetrik olasılık, 2.3.2.2.5.2.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.2.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.5.2.2.1/6-7
ilk düzgün simetrik olasılık, 2.3.2.2.5.2.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.2.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.5.2.3.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.5.2.3.1/3-4

ilk düzgün simetrik olasılık, 2.3.2.2.6.2.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.2.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.2.3.1/4-5

ilk düzgün simetrik olasılık, 2.3.2.2.6.2.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.4.1.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.6.4.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.4.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.4.2.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.6.4.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.4.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.4.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.6.4.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.4.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.6.1.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.6.6.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.6.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.6.2.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.6.6.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.6.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.6.3.1/[illegible]

ilk düzgün simetrik olasılık, 2.3.2.2.6.6.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.6.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.7.1.1/6

ilk düzgün simetrik olasılık, 2.3.2.2.6.7.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.7.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.7.2.1/6

ilk düzgün simetrik olasılık, 2.3.2.2.6.7.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.7.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.7.3.1/4-5

ilk simetrik olasılık, 2.3.2.1.9.6.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.6.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık, 2.3.2.1.9.6.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.6.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık, 2.3.2.1.9.7.1.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.7.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık, 2.3.2.1.9.7.2.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.7.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık, 2.3.2.1.9.7.3.1/4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.7.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.1.1.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.1.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.1.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.1.2.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.1.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.1.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.1.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.1.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.1.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.2.1.1/7

ilk düzgün simetrik olasılık, 2.3.2.2.7.2.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.2.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.2.2.1/7

ilk düzgün simetrik olasılık, 2.3.2.2.7.2.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.2.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.2.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.2.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.2.3.1/7

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

ilk simetrik olasılık, 2.3.2.1.10.1.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.1.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.1.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.1.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.2.1.1/7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.2.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.2.2.1/7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.2.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.2.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.2.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.4.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.4.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.4.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.4.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.4.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.4.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.6.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.6.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.6.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.6.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.10.6.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.6.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.4.3.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.4.3.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.6.1.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.6.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.6.2.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.6.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.6.3.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.6.3.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.7.1.1/8-9

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.7.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.7.2.1/8-9

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.7.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.7.3.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.7.3.1/6

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 olan ve bağımlı olasılıklı dağılımın ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılığın, tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık kitabında, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu olan ve bağımlı olasılıklı dağılımın ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılığın, tanım ve eşitlikleri verilmektedir.

VDOİHİ'nin diğer ciltlerinde olduğu gibi [illegible] ciltte [illegible] verilen [illegible] eşitlikler, olasılık tablolarından elde edilen verilerle üretilmiştir. Diğer eşitlikler ise ana eşitliklerden teorik yöntemle üretilmiştir. Eşitlik ve tanımların üretilmesinde dış kaynak kullanılmamıştır.