

VDOİHİ

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

Cilt 2.3.3.3.7.1.1.135

İsmail YILMAZ

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VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık Cilt 2.3.3.3.7.1.1.135

İsmail YILMAZ

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

Dili: Türkçe + Matematik Mantık



Türkiye Cumhuriyeti Devleti
Kuruluşunun
100.Yılı Anısına



M. Atatürk

DÜZELTME

Bu cilt için

$fzS_{j_s, j_{ik}, j^{sa}, j_i}$

simgesi yerine

$fzS_{j_s, j_{ik}, j^{sa}, j_i}^{DOST}$

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

VDOİHİ

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- ✓ Makinaların insan gibi düşünebilmesini, karar verebilmesini ve davranışabilmesini sağlayacak gerçek yapay zekayla ilişkilendirilmiştir.
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- ✓ 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.

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GÜLDÜNYA

Simge ve Kısalmalar

n: olay sayısı

n: bağımlı olay sayısı

m: bağımsız olay sayısı

t: bağımsız durum sayısı

I: simetrinin bağımsız durum sayısı

l: simetrinin bağımlı durumlarından önce bulunan bağımsız durum sayısı

I: simetrinin bağımlı durumlarından sonra bulunan bağımsız durum sayısı

k: simetrinin bağımlı durumları arasındaki bağımsız durumların sayısı

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

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

i_l: simetrinin ilk bağımlı durumunun, bağımlı olasılık farklı dizilimsiz dağılımin son olayı için sırası. Simetrinin sonuncu bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlardaki sırası

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

l_s: simetrinin ilk bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz

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

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

l_{sa}: simetrinin aranacağı bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası. Simetrinin aranacağı bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlardaki 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 ($j_{sa}^i = s$)

j_{ik}: simetrinin ikinci olayındaki durumun, gelebileceği olasılık dağılımlardındaki 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 bulunduğuanda bağımsız durumdan önceki bağımlı durumun bağımlı olasılıklı dağılımlarda bulunabileceği olayların son olaydan itibaren sırası

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

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

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

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

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

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

D : bağımlı durum sayısı

D_i : olayın durum sayısı

s : simetrinin bağımlı durum sayısı

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

m : olasılık

M : olasılık dağılım sayısı

U : uyum eşitliği

u : uyum derecesi

s_i : olasılık dağılımı

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

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

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

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

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

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

$f_z S_{j,sa}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin durumuna bağlı tek kalan simetrik olasılık

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

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$f_z S_{j,s,j_i}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

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

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

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

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

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$f_z S_{j_s,j,sa,0}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi bir

durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

$fzS_{j_s,j^{sa},D}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

$fz_0S_{j_s,j^{sa}}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

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bağımlı simetrinin herhangi iki durumuna bağlı tek kalan düzgün simetrik olasılık

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bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

${}^0fzS_{j_s,j_{ik},j_i,0}^{DSST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

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durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

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

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${}_{fz}S_{j^{sa}}^{DOST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu

simetrinin durumuna bağlı tek kalan düzgün olmayan simetrik olasılık

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durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık

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$f_{z,j} S_{j_s,j^{sa},D}^{DOST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık

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bağlı tek kalan düzgün olmayan simetrik olasılık

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bağımsız-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık

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$fz,0S_{j_s,j_{ik},j^{sa},j_i}^{DOST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı

durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık

$f_{z,0}S_{j_s,j_{ik},j^{sa},j_i,0}^{DOST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık

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E2

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar

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

bu üye sıralama sırasıyla elde edilebilen kurallı tablolar kullanılmaktadır. Farklı dizilimsiz dağılımlarda durumların küçükten büyükeye sıralama için verilen eşitliklerde kullanılan durum sayısının düzenlenmesiyle, büyükten-küçüğe sıralama durumlarının eşitlikleri elde edilebilir.

Farklı dizilimsiz dağılımlar, dağılımin ilk durumuyla başlayan (bunun yerine farklı dizilimsiz dağılımlarda simetrinin ilk durumuyla başlayan dağılımlar), dağılımin ilk durumu hâncinde eşitimin herhangi bir durumuyla başlayan dağılımlar (bunun yerine farklı dizilimsiz simetride bulunmayan bir durumla başlayan dağılımlar) ve dağılımin ilk durumu ikinci olmak üzere dağılıminin başladığı farklı ikinci durumla başlayıp simetrinin ilk durumuyla başlayan dağılımların sonuna kadar olan dağılımlarda (bunun yerine farklı dizilimsiz dağılımlarda simetride bulunmayan diğer durumlarla başlayan dağılımlar) simetrik, düzgün simetrik, düzgün olmayan simetrik v.d. incelenir. Bağımlı dağılımlardaki incelenen başlıklar, bağımlı ve bir bağımsız olasılıklı dağılımlarda, bağımsız durumla ve bağımlı durumla başlayan dağılımlar olarak da incelenir.

BAĞIMLI ve BİR BAĞIMSIZ OLASILIKLI FARKLI DİZİLİMİMSİZ DAĞILIMLAR

Bağımlı dağılım ve bir bağımsız olasılıklı durumla oluşturulabilecek dağılımlara ve bağımlı olasılıklı dağılımların kesişti olay sağladıdan (bağımlı olay sağısı) büyük olay sağısı (bağımsız olay sağısı) dağılımla bağımlı ve bir bağımsız olasılık dağılımlar elde edilir. Bağımlı dağılım farklı dizilimsiz dağılımlıda bulunmaktadır, bu dağılımlara bağımlı ve bir bağımsız olasılık farklı dizilimsiz dağılımlar denir. Bağımlı ve bir bağımsız olasılıklı dağılımlar; bağımlı dağılımlara, bağımsız durumlar ilk sağlıdan dağıtılmaya başlanarak tabloları elde edilir. Bu bölümde verilen eşitlikler, bu yöntemle elde edilen kurallı tablolara göre verilmektedir. Farklı dizilimsiz dağılımlarda durumların küçükten-büyük sıralama sırasıyla elde edilebilen kurallı tablolar kullanılmaktadır. Farklı dizilimsiz dağılımlarda durumların küçükten-büyük sıralama için verilen eşitliklerde kullanılan durum sayısının düzenlenmesiyle, büyükten-küçüğe sıralama durumlarının eşitlikleri elde edilebilir.

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

Farklı dizilimsiz dağılımlarda simetrinin durumlarının olasılık dağılımındaki sıralama 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 oylara göre simetrik olasılık eşitlikleri, simetrinin durumlarının olasılık dağılımındaki sıralamalarına göre ayrı ayrı verilecektir. Bu eşitliklerin elde edilmesinde bağımlı olasılıklı farklı dizilimsiz dağılımlarda simetrinin durumlarının bulunabileceği oylara göre çıkarılan eşitlikler kullanılmış olacaktır. Bu eşitlikler, bir bağımlı ve bir bağımsız olasılıklı dağılımlar için VDC Üçgeni'nden çıkarılan eşitliklerle birleştirilerek, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda yeni eşitlikleri elde edilecektir. Eşitlikleri adlandırıldığında bağımlı olasılıklı farklı dizilimsiz dağılımlarda kullanılan adlandırmalar kullanılacaktır. İlgili adların başına simetrinin bağımlı ve bağımsız durumlarına göre ve dağılımının bağımsız veya bağımlı durumla başlamasına göre “Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı/bağımsız-bağımlı/bağımlı-bir bağımsız/bağımlı-bağımsız/bağımsız-bağımsız” durumları “bağımsız/bağımsız/bağımlı” kelimeleri getirilerek, simetrinin bağımlı durumlarının bulunabileceği oylara göre bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz adları elde edilecektir. Simetriden seçilen durumların bulunabileceği oylara göre simetrik, düzgün simetrik veya düzgün olmayan simetrik olasılık için birden fazla durum kullanılması durumunda gerekmedikçe yeni tanımlama yapılmayacaktır.

Simetriden durumların bağımlı olasılık farklı dizilimsiz dağılımlardaki sırasına göre verilen eşitliklerdeki toplam aralıka sınır değerleri, simetrinin küçükten-büyük'e sıralanan dağılımlara göre verildiği gibi 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 düzenlenerken büyükten-küçüğe sıralanan dağılımlar için de simetrik olasılık eşitlikleri elde edilecektir.

Bu nedenle bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımin ilk bağımlı durumu olasılıklı dağılımın başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımin aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin ilk herhangi iki ve son durumunun bulunabileceği oylara göre tek kalan düzgün olmayan simetrik olasılığın eşitlikleri verilmektedir.

***SİMETRİDEN SEÇİLEN DÖRT DURUMA GÖRE TEK KALAN DÜZGÜN OLMAYAN
SİMETRİK OLASILIK***

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

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

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

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

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

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

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

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

$$f_z S_{j_s, j_{ik}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)} \\ \sum_{j_{ik}=\mathbf{n}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{sa}+s-l-j_{sa}+1} \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i}^{n_{sa}+j^{sa}-j_i} \\ \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)!}.$$

$$D > \mathbf{n} < n$$

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

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

$$\sum_{k=l}^{\mathbf{l}_i} (j_s = j_{ik} - j_{sa} - s)$$

$$\sum_{\substack{j_{ik} = j^{sa} + j_{sa} - s \\ j_{ik} > a}} (j^{sa} = \mathbf{n} - \mathbf{k} - D) \quad j_i = l_{sa} \quad j_{sa} + 2$$

$$\sum_{n_i = \mathbf{n} + \mathbf{k}}^n \sum_{\substack{(n_i - j_s + 1) \\ (n_i = \mathbf{n} + \mathbf{k} - j_s + 1)}}^{\mathbf{l} + 1} \sum_{n_{ik} = \mathbf{n} + \mathbf{k}_2 - j_{ik} + 1}^{n_i - j_s - \mathbf{k}_1} \\ \sum_{\substack{(n_{sa} = \mathbf{n} - j^{sa} + 1) \\ (n_{sa} = \mathbf{n} - j^{sa} + 1)}}^{l_{sa} - j_{ik} - j^{sa} - \mathbf{k}_2} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

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

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

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

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

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_{sa} + s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_{sa} + j_i - \mathbf{n} - s - \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

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

$$D \leq \mathbf{n} < n \wedge l_s \leq D - \mathbf{n} - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + s \wedge j_s + j_{sa}^s - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

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

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

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

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

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

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

$$D > \mathbf{n} < n$$

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

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

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

$$(n_{ik}+j_{ik}-j_{sa}^{ik}-1) \quad n_{sa} = j_{sa} - j_i$$

$$(n_{sa}=\mathbf{n}-j_{sa}+1) \quad n_s=\mathbf{n}-j_i$$

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

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

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

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

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

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

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

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

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{(l_{ik}+j_{sa}-\mathbf{l}-j_{sa}^{ik}+1)} \sum_{j_i=l_{ik}+s-\mathbf{l}-j_{sa}^{ik}+2}^{l_i-\mathbf{l}+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - j_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_i - j_i)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D + j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(l_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \quad \frac{(\mathbf{D} - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \quad \sum_{k=\mathbf{l}}^{\mathbf{D}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\mathbf{D}} \\
& \quad \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\mathbf{D}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\mathbf{D}} \sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{l_{ik}+s-\mathbf{l}-j_{sa}^{ik}+1} \\
& \quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\mathbf{D}} \\
& \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\mathbf{D}} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\mathbf{D}}
\end{aligned}$$

$$D > \mathbf{n} < n$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(\mathbf{l} - 1)!}{(\mathbf{l}_s - \mathbf{l} - l + 1, \mathbf{l} - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_s - s)!}{(j^{sa} + \mathbf{l}_i - \mathbf{l}_s - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(\mathbf{D} - 1)!}{(\mathbf{D} + j_{ik} - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!} +$$

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

$$\sum_{j_{ik}=j^{sa}}^{n_s+j_{sa}-l} \sum_{(j^{sa}=\mathbf{l}_s+\mathbf{n}+j_{sa}-D-1)}^{n_s+j_{sa}-l} \sum_{j_i=\mathbf{l}_s+s-\mathbf{l}+1}^{l_i-l+1}$$

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

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

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

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

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

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

$$D > \mathbf{n} < n$$

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

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

$$\sum_{k=l}^{\infty} (j_s = j_{ik} - j_{sa} - \mathbb{k}_1)$$

$$\sum_{j_{ik}=n+1-j_{sa}-\mathbb{k}_1}^{n} \sum_{j_{sa}=j_i+j_{sa}-s, j_i=s+D}^{(j_i-j_s+1)} \sum_{l_s+s-l}^{l_s+s-l}$$

$$\sum_{n=\mathbb{k}}^{\infty} \sum_{(n_{is}=n+j_s+1) \quad n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{is}=n+j_s+1) \quad n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \quad n_s=n_{sa}+j^{sa}-j_i}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \quad n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_i - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

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

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

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

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

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

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

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

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s + \mathbb{k} - j_{sa}^{ik} + 1)}^{\infty} \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{\infty} \sum_{(j^{sa} + \mathbb{n} - D - s - 1)}^{\infty} \sum_{j_i = l_i + \mathbb{n} - D}^{\infty} \sum_{n = n_j - \mathbb{k} (n_{is} - \mathbb{k} - j_s + 1) - n_{ik}}^{\infty} \sum_{n_{is} = n - j^{sa} + 1}^{\infty} \sum_{n_{ik} = n - j_{sa} + 1}^{\infty} \sum_{n_{sa} = n - j_i + 1}^{\infty} \sum_{n_s = n - j_{ik} + 1}^{\infty} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\ \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

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

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

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

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

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

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

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()} \\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-i_s}^{()} \\ \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge \\ 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge \\ j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + s - 1 \leq j_i \leq \\ l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa}^{ik} = l_{ik} \wedge j_{sa} + j_{sa} - s > l_{sa} \wedge$$

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

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} \wedge \\ s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}\} \wedge$$

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

$$\exists z: z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k} \Rightarrow$$

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

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

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

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

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

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

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

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

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

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa} - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

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

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

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

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

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

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

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

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

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

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

$$\frac{(\mathbf{l} - 1)!}{(\mathbf{l}_s - \mathbf{l} + 1 - l + 1)! \cdot (l - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_s - s)!}{(j^{sa} + \mathbf{l}_i - \mathbf{l}_s - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - 1)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{D}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\begin{array}{c} \\ \end{array}\right)}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_i-j_{sa}}^{j_{sa}-\mathbf{l}-j_{sa}^{ik}} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\left(\begin{array}{c} \\ \end{array}\right)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\left(\begin{array}{c} \\ \end{array}\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\begin{array}{c} \\ \end{array}\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

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

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

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

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

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

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

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

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

$$S_{j_s, j_{ik}, j_{sa}, l_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{n+j_{sa}-D-1} \sum_{j_l=l_i+n-D}^{l_i-l+1}$$

$$\sum_{i_k=j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j^{sa}=n+j_{sa}-D-1)}^{n+j_{sa}-D-1} \sum_{j_l=l_i+n-D}^{l_i-l+1} \\ \sum_{i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n_i-j_s+1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

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

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

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

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

$$\sum_{j_a=n-j^{sa}+1}^{j_{ik}+j_{ik}-j_s-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

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

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

$$\begin{aligned} & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{\infty} \sum_{j_i=j^{sa}+s-i}^{\infty} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}-\mathbb{k}_1}^{\infty} \\ & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j_{sa}^s}^{\infty} \\ & \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - s - \mathbf{n} - \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot \\ & \frac{1}{(j_{sa}^s - j_s - s)!} \cdot \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \end{aligned}$$

$$\begin{aligned} & D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa}^{ik} - 1 \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & D \geq \mathbf{n} < n \wedge \mathbb{k} = \mathbb{k}_2 > \mathbb{k}_1 \wedge \\ & j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge \\ & s: \{j_{sa}^s, \mathbb{k}_1, i, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge \\ & s \leq j_{sa}^s = s + \mathbb{k} \wedge \\ & \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow \end{aligned}$$

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

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

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

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

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

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

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

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

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

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

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

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

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

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

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

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

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

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

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

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

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)} \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{n+j_{sa}^{ik}-D-s-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_i-\mathbf{l}+1} \\ \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}-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} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l} - s)!}.$$

$$\frac{(\mathbf{l}_i - l_i)!}{(i - \mathbf{n} - l_i + 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{i=l}^{l_i-l+1} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{\infty} \left\{ \right.$$

$$\sum_{j_{ik}=j_{ik}+\mathbf{n}+j_{sa}^{ik}}^{-l+1} \sum_{(j_{ik}+j_{sa}-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

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

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

$$n_i=n+\mathbb{k}-j_{sa} \quad n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j_{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i \wedge j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

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

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

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

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

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

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
 & \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}^{ik})}^{\infty} \sum_{j_i=n-D}^{l_i-l+1} \\
 & \sum_{n_i=n+j_{sa}^{ik}-j_{ik}+1}^n \sum_{(n_i-j_s)}^{n_i-j_s} \sum_{n_{is}=n+j_{sa}^{ik}-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
 & \sum_{(n_{sa}=n+j_{sa}^{ik}+1)}^{n_{sa}-j_{ik}-j^{sa}+1} \sum_{n_s=n-j_i+1}^{j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - n_{is} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

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

$$\begin{aligned}
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}
\end{aligned}$$

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!} \cdot$$

$$\frac{(l_s - l - 1)! \cdot (j_s - s - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s - 1)!}.$$

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

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

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - s \wedge$$

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

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

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

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

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

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

$$\exists z : z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k} \Rightarrow$$

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

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right.} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

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

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

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

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

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

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

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

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s + 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

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

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

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

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

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

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

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

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

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

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

$$\frac{(\mathbf{l} - l - 1)!}{(l_s - l - \mathbf{l} + 1) \cdots (l_1 - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - \mathbf{l}_i - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(\mathbf{D} - l - 1)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

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

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n_{is}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_i}$$

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

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

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

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

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

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

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

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

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

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

$$fz^{e_{i-1}}_{(j_{ik}, j^{sa}, j_i)} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(l_i-n-D-s)}$$

$$\sum_{j_{sa}=i_s+j_{sa}^{ik}-1}^{n} \sum_{(j_i=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n_i-j_{ik}+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

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

$$\sum_{k=l}^{(\mathbf{l}_{ik}-\mathbf{l}-j_{sa}^{ik}+2)} \left[\begin{array}{c} \\ \end{array} \right]$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-s}^{(\mathbf{l}_{ik}-\mathbf{l}-j_{sa}^{ik}+2)} \left(\begin{array}{c} \\ \end{array} \right) \sum_{j_i=j^{sa}+s-j_{sa}}^{(\mathbf{l}_{ik}-\mathbf{l}-j_{sa}^{ik}+2)}$$

$$\sum_{n_i=n-(j^{sa}-s)}^n \left(\begin{array}{c} \\ \end{array} \right) \sum_{n_{is}=n+\mathbb{k}_1-(j^{sa}-s+1)}^{n-i-J_s+\mathbb{k}_1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n-is-j_{ik}-\mathbb{k}_1}$$

$$\sum_{j_a=n-j^{sa}+1}^{(\mathbf{l}_{ik}+j_{ik}-J_s-\mathbf{l}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

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

$$\begin{aligned}
& \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{\left(\begin{array}{c} l \\ j_i \end{array}\right)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\left(\begin{array}{c} l \\ j_{ik} \end{array}\right)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\begin{array}{c} l \\ j_{sa} \end{array}\right)} \sum_{j_i=j^{sa}+s-1}^{\left(\begin{array}{c} l \\ j_i \end{array}\right)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\left(\begin{array}{c} l \\ n_i \end{array}\right)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}^{ik}}^{\left(\begin{array}{c} l \\ n_{ik} \end{array}\right)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_1}^{\left(\begin{array}{c} l \\ n_{sa} \end{array}\right)} \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - n - \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot \\
& \frac{1}{(j_{sa}^s - j_s - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
& D \geq n < n \wedge l_s > D - n + 1 \wedge \\
& 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
& j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa}^{ik} - 1 \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\
& D \geq n < n \wedge \mathbb{k} = \mathbb{k}_1 > \mathbb{k}_2 \wedge \\
& j_{sa}^s = j_{sa}^{i-1} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge \\
& s: \{j_{sa}^s, \mathbb{k}_1, i, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge \\
& s = j_{sa}^s \wedge s = s + \mathbb{k} \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow
\end{aligned}$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}^{\left(\begin{array}{c} l_i+n-D-s \\ j_s \end{array}\right)}$$

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

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

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

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

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

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

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

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

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

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

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

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

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

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_i - s)!}.$$

$$\frac{(\mathbf{l}_i - l_i)!}{(\mathbf{l}_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{i=l}^n \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{l_{sa}+s-l-j_{sa}+1} \dots$$

$$\sum_{i=j^{sa}+j_{ik}-l-i_1}^n \sum_{j_i=j_i+j_{sa}-s}^{l_{sa}+s-l-j_{sa}+1} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{sa}+s-l-j_{sa}+1}$$

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

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

$$\frac{3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

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

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

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

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

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

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

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

$$\begin{aligned} f(z) &= \sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}^{ik}-j_{sa}^{ik}+1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-j_{sa}^{ik}}^{(l_i-l+1)} \sum_{j_i=l_i+n-D}^{n_i} \\ &\quad \sum_{n_i=n+\mathbb{k}}^{(n_{is}+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ &\quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \end{aligned}$$

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$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

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

$$\sum_{k=l}^{\infty} \sum_{\substack{() \\ j_s = j_{ik} - j_{sa}^{ik} +}}^{\infty} \sum_{\substack{() \\ j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}}^{\infty} \sum_{\substack{() \\ j^{sa} = j_i + j_{sa} - s - j_{ik} - j_{sa}}}^{\infty} \sum_{\substack{() \\ l_{ik} + l_i - l - j_{sa}^{ik} + 1 \\ l_i + j_{sa} - s - j_{ik} - j_{sa}}}^{\infty} -$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_s+1) \\ n_{ik}=n_i+j_{sa}-s-j_{ik}-\mathbb{k}_1}}^{\infty} \sum_{\substack{(n_i-j_s+1) \\ n_{sa}=n_i+j_{sa}-s-j_{ik}-j^{sa}}}^{\infty} \sum_{\substack{(n_i-j_s+1) \\ n_s=n_{sa}+j^{sa}-j_i}}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_s - n_{sa} - j^{sa} - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_s - n_{sa} - j^{sa} - j_{sa} - s - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

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

$$\begin{aligned} & D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge \\ & D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge \\ & 2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^s \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & \mathbf{l}_{ik} - j_{sa}^s + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge \end{aligned}$$

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

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

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

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

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

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
&\quad \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_s+\mathbf{n}+j_{sa}-D-1)}^{\infty} \sum_{l_i+l_1=D}^{\infty} \\
&\quad \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_{is}+1)}^{\infty} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{\infty} \\
&\quad \sum_{n_{sa}=n-j^{sa}+1}^{\infty} \sum_{j_i+1}^{\infty} \\
&\quad \frac{(n_{ik}-n_{is}-1)!}{(j_s-2)! \cdot (n_i+n_{is}-j_s+1)!} \cdot \\
&\quad \frac{(n_i-n_{ik}-1)!}{(j_{ik}-i_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\quad \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
&\quad \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
&\quad \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
&\quad \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
&\quad \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
&\quad \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
&\quad \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}
\end{aligned}$$

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

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

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_s=j_s+2\cdot\mathbb{k}-\mathbb{k}_1)!}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(n - n_{sa} - j_s - s)!}$$

$$\frac{(l_s - l + 1)! \cdot (j_s - 2)!}{(l_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_s - l + 1)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

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

$$D + l_s + s - n - l_i + 1 \leq j_s \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

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

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

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\ \ \right)} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - l)^!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{ik}) \cdot (\mathbf{n} - l_i)! \cdot (n - j_i)!}$$

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

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - 2 \wedge$$

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

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

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

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

$$s = 4 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_{z_1} = 2 \wedge \mathbb{k} = \mathbb{k}_1 - \mathbb{k}_2 \Rightarrow$$

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

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

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

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

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

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

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

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

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

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa} + 1) \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

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

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i - 1)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} \wedge$$

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

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

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

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

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

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

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\ \sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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

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

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

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

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

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

$$\frac{(\mathbf{l} - l - 1)!}{(\mathbf{l}_s - \mathbf{l} - l + 1) \cdot (\mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_s - s)!}{(j^{sa} + \mathbf{l}_i - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - l - 1)!}{(\mathbf{D} + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

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

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

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

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

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

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

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

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

$$\sum_{f=1}^{l+1} \sum_{(j_s=l_s+n-D)}^{(l+1)}$$

$$\sum_{\substack{i \\ j_{ik}=j_s+j_{sa}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

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

$$\sum_{k=l}^{(\mathbf{l}-\mathbf{l}+1)} \sum_{(j_s = l_t + \mathbf{l} - \mathbf{l} + s + 1)}^{(l - l + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(j_{sa} = j_{ik} + j_{sa} - \mathbf{k} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{(n_i = n + \mathbf{k} - \mathbf{l} + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbf{k}_1}^{(n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbf{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i}^{(n_i = n + \mathbf{k} - \mathbf{l} + 1)}$$

$$\frac{((n_{is} + 2 \cdot j_s - n_{sa} - j^{sa} - j_i - s - 2 \cdot \mathbf{k} - \mathbf{k}_1)!) }{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbf{k} - \mathbf{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

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

$$D \geq n \wedge \mathbf{l}_s > \mathbf{n} - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{i-1} + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

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

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

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

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

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

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
 &\quad \sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa})}^{\infty} \sum_{i=l_i-D}^{l_{ik}-l-j_{sa}^{ik}+1} \\
 &\quad \sum_{n_i=n+j_{sa}^{ik}-j_{ik}+1}^n \sum_{(n_i-j_s)}^{n_{is}+j_s-j_{ik}-j_{sa}} \sum_{n+n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-j_{sa}} \\
 &\quad \sum_{(n_{sa}=n-j_{sa}+1)}^{n_{is}+j_{sa}-1} \sum_{n_s=n-j_i+1}^{j^{sa}-j_i} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

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

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

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

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

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

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

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

$$\frac{(n_{sa} - n_s - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}.$$

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j_{sa} - \mathbf{l}_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

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

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

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

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{} \sum_{n_s=n_{sa}+j^{sa}-i_s}^{} \\
& \quad \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot (D - l - s)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!} \cdot \\
& \quad \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot \\
& \quad \frac{(D - l - s)!}{(D - l_i - n - s + j_i - n - j_i)!} \\
& D \geq n < n \wedge l_s > D - n + 1 \wedge \\
& 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge \\
& j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + s - 1 \leq j_i \leq l_i \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa}^{ik} > l_{ik} \wedge j_{sa} - s = l_{sa} \wedge
\end{aligned}$$

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

$$\begin{aligned}
& j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} \wedge \\
& s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}\} \wedge
\end{aligned}$$

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

$$\exists z: z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k} \Rightarrow$$

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

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

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

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

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

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

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

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

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - l - \mathbf{l} + 1) \cdot (\mathbf{l} - 2)!} \cdot$$

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

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

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

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

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

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

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

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

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

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

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

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

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

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

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

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

$$S_{j_s, j_{ik}, j_{sa}, l_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

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

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{\substack{j_s=j_{ik}+j_{sa}^{ik}+1 \\ (j_s=j_{ik}+j_{sa}^{ik}+1)}}^{\infty} \sum_{\substack{i_l=j^{sa}+s-j_{sa} \\ i_t=j^{sa}+s-j_{sa}}}^{l_i+j_{sa}(s+1)} \sum_{\substack{n_i=n+\mathbb{k}_1-j_{ik}-\mathbb{k}_1 \\ n_i=n+\mathbb{k}_2-j_{ik}-\mathbb{k}_2 \\ n_{ik}=n+\mathbb{k}_2-j_{ik}+1}}^{n-i \\ n-i-j_{ik}+1 \\ n_{ik}-j_{ik}+1} \sum_{\substack{n_{sa}=n-j^{sa}+1 \\ n_s=n-j_i+1}}^{n_{sa}+j^{sa}-j_i} \sum_{\substack{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2 \\ n_{sa}+j^{sa}-j_i}}^{n_{sa}+j^{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

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

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

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{\infty} \sum_{j_i=j^{sa}+s-1}^{\infty}$$

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-s)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - s - 2 - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - s - \mathbf{n} - 2 - \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(j^{sa}+j_{sa}-j_s-s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

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

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

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

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

$$D \geq \mathbf{n} < n, \mathbb{k} = \mathbb{k} > 0 \wedge$$

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

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

$$s \leq s \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

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

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

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

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

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

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1) \cdot (j_s - 2)!}.$$

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

$$\frac{(\mathbf{l}_i - \mathbf{l} - 1)!}{(\mathbf{l}_i - j_i - \mathbf{l} + 1) \cdot (n - j_i)!}.$$

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

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

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{\substack{j_{ik}=l_i+n+j_{sa}^{ik}-D \\ n_i=n+\mathbf{k}}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{\substack{j_{ik}=n-i_{ik}+j_{sa}-j_{ik} \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbf{k}_1}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{\substack{j_{ik}=n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2 \\ n_s=n_{sa}+j^{sa}-j_i}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{\substack{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbf{k} - \mathbf{k}_1)! \\ (3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbf{k} - \mathbf{k}_1 - j_{sa}^s)!}}$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

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

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

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

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

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

$$\begin{aligned}
f_z S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
& \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_i+n+j_{sa})}^{(l_i+j_{sa}-l-s+1)} \sum_{(j_i=j^{sa}-j_{sa})}^{(n_i-j_s)} \\
& \sum_{n_i=n+j_{sa}}^n \sum_{(i_s+1)}^{(n_i-j_s)} \sum_{(n_i-n+\mathbb{k}_2-j_{ik}+1)}^{(n_{is}+j_s-j_{ik})} \\
& \sum_{(n_{sa}=n-j_s-a+1)}^{(n_{is}-j_i+1)} \sum_{(n_s=n-j_i+1)}^{(j^{sa}-j_i)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - j_i - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_s - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
\end{aligned}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot \\ \frac{(D - \mathbf{n})!}{(D - j_i - \mathbf{n})! \cdot (\mathbf{n} - j_i)!}$$

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

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - s \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - l - l + 1) \cdot (\mathbf{l}_s - 2)!} \cdot$$

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

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

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

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

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

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

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

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

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

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

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

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

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

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

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

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

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

$$f_z S_{j_s, j_{sa}, j_{i_k}, j_{sa}} = \sum_{k=l}^{(j_i+n-D-s)}$$

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

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

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

$$\sum_{k=l}^{n-l+1} \sum_{\substack{j_s = l_i + n - k - s + 1 \\ j_{ik} = j_s + j_{sa}^{ik} - j^{sa} - j_{ik} - j_{sa}}}^{\mathbf{l}_s - l + 1} \sum_{\substack{(l_i + j_s) - l - s + 1 \\ j_i = j^{sa} + s - j_{sa}}}$$

$$\sum_{\substack{n_i = n + j_{sa} - j^{sa} - j_{ik} - \mathbf{k}_1 \\ n_{ik} = n + j_{sa}^{ik} - j^{sa} - j_{ik} - \mathbf{k}_2}}^n \sum_{\substack{n_{is} = n + \mathbf{k}_1 - 1 \\ n_{sa} = n + \mathbf{k}_2 - 1}}^n \sum_{\substack{n_{ik} = n + \mathbf{k}_2 - j_{ik} + 1 \\ n_{sa} + j^{sa} - j_i \\ n_s = n - j_i + 1}}$$

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

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

$$\begin{aligned}
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_l+n-D-s+1)}^{} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j}^{} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j}^{} \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - i_s - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_s - n - j^{sa} - i_s - s - \mathbf{n} - \mathbb{k} - \mathbb{k}_1 - j_{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}
\end{aligned}$$

$$\begin{aligned}
& D \geq \mathbf{n} < n \wedge l_s = D - \mathbf{n} + 1 \wedge \\
& 2 \leq j_s \leq j_{ik} \wedge j_{sa}^{ik} + 1 \leq j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
& j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge
\end{aligned}$$

$$D \geq \mathbf{n} < n \wedge \mathcal{N} = \mathbb{k} >= \mathbb{k}_1 \wedge$$

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

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

$$s = j_{sa}^s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

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

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

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

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

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

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

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

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\left(\begin{array}{c} n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa} \end{array}\right)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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

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

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

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

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

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

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

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

$$\sum_{k=l}^{\left(\begin{array}{c} \mathbf{n} \\ j_i \end{array}\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\begin{array}{c} \mathbf{n} \\ j_s \end{array}\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(\begin{array}{c} \mathbf{n} \\ j_{ik} \end{array}\right)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\begin{array}{c} \mathbf{n} \\ j^{sa} \end{array}\right)} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{\left(\begin{array}{c} \mathbf{n} \\ n_{is} \end{array}\right)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \mathbf{n} \\ n_{sa} \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\begin{array}{c} \mathbf{n} \\ n_s \end{array}\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

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

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

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

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

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

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

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

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)} \sum_{\substack{j_{sa}^{ik}-j_{sa} \\ j_{ik}=l_s+n+j_{sa}^{ik}-D-1}}^{n} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-\mathbf{l}}$$

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} + j_{sa} - j_{ik} - 1) \cdot (j_{sa})!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - n - \mathbf{k} - 1) \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{l=1}^{\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{j_{ik}=n+\mathbf{k}+n+j_{sa}^{ik}}^{n+l_{sa}^{ik}-l} \sum_{(j_i=j_i+j_{sa}-s)}^{(n_i-j_s+1)} \sum_{j_i=l_s+s-l+1}^{l_{sa}+s-l-j_{sa}+1}$$

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\infty} \sum_{\substack{() \\ (j_s=j_{ik}-j_{sa}^{ik}+1)}} \sum_{\substack{() \\ (j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{\substack{() \\ (n+i_s+1)}} \sum_{\substack{() \\ (n_i=n+ \mathbb{k} - j_s)}} \sum_{\substack{() \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}} \sum_{\substack{() \\ (n_{sa}=n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2)}} \sum_{\substack{() \\ (n_s=n_{sa}+j^{sa}-j_i)}} \sum_{\substack{() \\ (n_{sa}=n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_1-\mathbb{k}_2) \quad n_s=n_{sa}+j^{sa}-j_i}} \frac{1}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

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

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

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

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

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

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
 &\quad \sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \\
 &\quad \sum_{n_i=n+1}^n \sum_{(n_i-j_s=j_{sa}+1)}^{(n_i-j_s-j_{ik}+1)} \sum_{n_s=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-j_{sa}} \\
 &\quad \sum_{(n_{sa}=n-j_s+1)}^{(n_{sa}-j_{sa}+1)} \sum_{n_s=n-j_i+1}^{j^{sa}-j_i} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - j_{is} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

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

$$\begin{aligned} & \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{(l_{sa}-l+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}=n-\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}} \\ & \sum_{(n_{ik}+j_{ik}-j_{sa}+1)}^{(n_{sa}=n-j_{sa}+1)} \sum_{n_s=\mathbf{n}-j_i}^{n_{sa}+j_{sa}-j_i} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_s - 1)! \cdot (j_s + 1)!} \cdot \\ & \frac{(n_{is} - j_{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^{sa} - j_{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \end{aligned}$$

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

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

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

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

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

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

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-i_s}^{\left.\right)} \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})} \\
& \quad \frac{(j_s - s)!}{(l_s - l - 1)!} \\
& \quad \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \\
& \quad \frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!} \\
& D \geq n < n \wedge l_s > D - n + 1 \wedge \\
& 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge \\
& j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} \wedge j^{sa} + s - j_{sa}^{ik} \leq j_i \leq \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge j^{sa} + j_{sa} - s = l_{sa} \wedge \\
& D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge
\end{aligned}$$

$$\begin{aligned}
& j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} \wedge \\
& s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}\} \wedge
\end{aligned}$$

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

$$\exists z: z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k} \Rightarrow$$

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

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

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

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

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

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

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

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

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

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - l - \mathbf{l} + 1) \cdot (\mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - l_{ik} - l_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - n - j_{ik} - j_{sa})!} \cdot$$

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

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

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

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

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

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

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

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

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

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

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

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

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

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

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

$$\begin{aligned}
& S_{j_s, j_{ik}, j_{sa}, l_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_{sa}-l+1)} \sum_{n_{ik}=n-\mathbb{k}-j_{sa}^{ik}+1}^{+n+j_{sa}^{ik}-D-j_{sa}} \\
& \sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.
\end{aligned}$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{\substack{j_s=j_{ik}+j_{sa}-j_{ik}^{ik}+1 \\ (j_s=j_{ik}+j_{sa}-j_{ik}^{ik}+1)}}^{\left(\begin{array}{c} l \\ l_{ik}-l+1 \end{array}\right)} \sum_{\substack{i_l=j^{sa}+s-j_{sa} \\ i_l=j^{sa}+s-j_{sa}}}^{(l_{ik}-l+1)}$$

$$\sum_{\substack{n_i=n+\mathbb{k}_1 \\ n_i=n+\mathbb{k}_2-1 \\ n_i=n+\mathbb{k}_2-1}}^{n} \sum_{\substack{-j_s+1 \\ -j_s+1 \\ -j_s+1}}^{n-i_k-1} \sum_{\substack{n_{ik}=n+\mathbb{k}_2-j_{ik}+1 \\ n_{ik}=n+\mathbb{k}_2-j_{ik}+1 \\ n_{ik}=n+\mathbb{k}_2-j_{ik}+1}}^{i_k-1} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_{sa}+j^{sa}-j_i \\ n_{sa}+j^{sa}-j_i}}^{i_k+j_{ik}-j_{ik}^{ik}-\mathbb{k}_2}$$

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

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

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

$$\begin{aligned} & \sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-l+1} \sum_{(j_s=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-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}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}^{(\)} \\ & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j_{sa}^s}^{(\)} \\ & \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_{ik} - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_{ik} - s - \mathbf{n} - \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot \\ & \frac{1}{(j_{sa}^s - j_s - s)!} \cdot \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \end{aligned}$$

$$\begin{aligned} & D \geq \mathbf{n} < n \wedge l_s > \mathbf{D} - \mathbf{n} + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D \geq \mathbf{n} < n \wedge \mathbb{k} = \mathbb{k} > \mathbb{k} \wedge \\ & j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge \\ & s: \{j_{sa}^s, \mathbb{k}_1, i, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge \\ & s = j_{sa}^s = s + \mathbb{k} \wedge \\ & \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow \end{aligned}$$

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

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

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

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

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

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

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

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

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

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

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

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

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

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

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

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i - 1)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

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

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

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

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

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

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

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{n} \sum_{(j_{sa} = l_{sa} + \mathbf{n} - D)}^{(l_{sa} - l + 1)} \sum_{j_i = j_{sa}^{sa} + s - j_{sa}}^{n_{is}}$$

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

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

$$\frac{(\mathbf{l}_i - \mathbf{l} - 1)!}{(\mathbf{l}_i - n - \mathbf{k}_i - 1)! \cdot (n - j_i)!}.$$

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

$$\sum_{i=j_{sa}+n-D-j_{sa}+1}^{-l+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot \sum_{\substack{k=l_s - j_{sa} + n - l_i - j_{ik} \\ k=j_{ik} - j_{sa} + 1}}^{\substack{(\mathbf{l}_{ik} - j_{sa}^{ik} + 2) \\ (\mathbf{l}_{ik} - j_{sa} + n - l_i)}} \sum_{\substack{j_{ik}=j_s + j_{sa}^{ik} \\ j_{ik}=n + \mathbf{k} - j_s \\ j_{ik}=n_{is} + j_s - j_{ik} - \mathbf{k}_1}}^{\substack{(j_{ik} - j_{sa} + 1) \\ (j_{ik} - j_{sa} + \mathbf{k} - 1) \\ (j_{ik} - n_{is} + j_s - \mathbf{k}_1)}} \sum_{\substack{n_{sa}=n_{ik} - j_{ik} - j^{sa} - \mathbf{k}_2 \\ n_s=n_{sa} + j^{sa} - j_i}}^{\substack{(j_{ik} - n_{sa} - \mathbf{k}_2) \\ (j_{ik} - n_{sa} - \mathbf{k}_2 - j^{sa})}} \sum_{\substack{n_{sa}=n_{ik} - j_{ik} - j^{sa} - \mathbf{k}_2 \\ n_s=n_{sa} + j^{sa} - j_i}}^{\substack{(j_{ik} - n_{sa} - \mathbf{k}_2) \\ (j_{ik} - n_{sa} - \mathbf{k}_2 - j^{sa})}} \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbf{k} - \mathbf{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbf{k} - \mathbf{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

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

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

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

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

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

$$\begin{aligned} {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \\ & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}-s-j_{sa}}^{(l_{sa}-l+1)} \\ & \sum_{n_i=n+1}^n \sum_{(n_i-j_{sa}-1)}^{(n_i-j_{sa}-1)} \sum_{(n_{is}+j_s-j_{sa})}^{(n_{is}+j_s-j_{sa})} \sum_{(\mathbb{k}_1)}^{(n_{is}+j_s-j_{sa})} \\ & \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{sa}=n-j_{sa}+1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)} \sum_{(j^{sa}-j_i)}^{(j^{sa}-j_i)} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - j_{sa} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \end{aligned}$$

güldin

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

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

$$\frac{(l_s - l - 1)! \cdot (j_s - s)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - l - 1)!}{(D - l_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

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

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

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

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

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k}_1 = 0 \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D + j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

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

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

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

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

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}$$

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

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

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

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

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

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

$$\sum_{j_{ik} = \mathbf{l}_s + \mathbf{n} + j_{sa}^{ik} - D - 1}^{l_s + j_{sa}^{ik} - l} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\)} \sum_{j_i = \mathbf{l}_i + \mathbf{n} - D}^{l_i - l + 1}$$

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

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

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(n - l - 1)!}{(l_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + n - l_i)! \cdot (n - j_i)!} - \\
& \sum_{k=l}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_l+j_{sa}-s)}^{\left(\right)} \sum_{j_i=l_i+n-D}^{l_s+s-l} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\right)} \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot \\
& \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.
\end{aligned}$$

gündüz

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

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

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

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

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

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

$$\frac{(3 \cdot n_{is} + \Delta^{ik} - n_s - n_{sa} - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

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

$$s > n < \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

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

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

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

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

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

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{l=l_{ik}}^{\infty} \sum_{(j_s=j_{ik}, j_{sa}^{ik}+1)}^{\left(\begin{array}{c} l \\ j_s \end{array}\right)} \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{l+n+j_{sa}-D}^{(l_i+j_{sa}-s+1)} \sum_{i_i=j_{sa}+s-j_{sa}}^{l_{ik}-\mathbb{k}_1} \\ \sum_{n_i=n+j_{sa}+1}^n \sum_{n_{is}=n+\mathbb{k}_2-j_{ik}+1}^{-j_s+1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{l_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j_{sa} - \mathbf{l}_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\begin{aligned}
& \sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{l}{k}} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\binom{l}{k}} \sum_{j_i=j^{sa}+s-j_{sa}^{ik}}^{l_{ik}-l+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-k_1}^{n_i-j_s+1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)}^{\binom{l}{k}} \sum_{n_s=n_{sa}+j_{sa}^{ik}}^{n_i-j_s+1} \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - l - k - k_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n - j^{sa} - l - n - k - k_1 - k_2 - j_{sa}^s)!} \cdot \\
& \frac{1}{(j_{sa}^s - j_s - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$\begin{aligned}
& D \geq n < n \wedge l_s > D - n + 1 \wedge \\
& D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge \\
& 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - j_{sa} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
& j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_{sa} + j_{sa}^{ik} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
& l_{ik} - j_{sa}^{ik} + s - l_s \wedge l_s + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
& D > l_i - n \wedge I = k \geq 0 \wedge \\
& j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge \\
& \{j_{sa}^i - 1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge
\end{aligned}$$

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

$$\mathbb{k}_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

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

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

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

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

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

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

$$\begin{aligned} & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}} \\ & j_{ik}=l_i+n+j_{sa}^{ik}-D-s \quad (j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}) \quad j_i=j^{sa}+s-j_{sa} \end{aligned}$$

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}.$$

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

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

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

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

$$D \geq n & I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - j_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_i - j_i)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \quad \sum_{k=\mathbf{l}}^{\mathbf{l}_{ik}-\mathbf{l}-j_{sa}^{ik}+2} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)}^{()} \\
& \quad \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{()} \\
& \quad \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()} \\
& \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()}
\end{aligned}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{is} - j_{sa}^{ik} - 1$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}}^{(l_s - l + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(l_i + j_{sa} - l - s + 1)} \sum_{(j^{sa} = l_i + n + j_{sa} - D - s)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - l - l + 1) \cdot (l_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - l_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa})! \cdot (j^{sa} + j_s - n_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^n \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

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$$f z^{\omega_{j_{ik} - j_{sa}^{ik} + 1, j^{sa}, j_i}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum_{l_{sa} + s - l - j_{sa} + 1} \\$$

$$\sum_{j_{sa} = j_{ik} + n - D - (j_i + j_{sa} - s)} \sum_{j_i = l_{sa} + n + s - D - j_{sa}} \\$$

$$\sum_{n_i = n + \mathbb{k}} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{(n_i - j_s + 1)} \sum_{n_{is} = n + \mathbb{k}_1 - j_i + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\$$

$$\sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_{sa} + j^{sa} - j_i} \\$$

$$(n_{sa} = n - j^{sa} + 1) \quad n_s = n - j_i + 1$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\infty} \sum_{\substack{() \\ (j_s=j_{ik}-j_{sa}+1)}} \sum_{\substack{() \\ (l_{ik}+s-k-1) \\ (j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}} \sum_{\substack{() \\ (n_i=n+\mathbb{k}-s) \\ (n_i=n+\mathbb{k}-j_s) \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}} \sum_{\substack{() \\ (n_{sa}=n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_s=n_{sa}+j^{sa}-j_i)}} \sum_{\substack{() \\ (3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)! \\ (3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!)}}$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D > \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, l_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{l_{sa}} \sum_{(j_s + j_{sa} - j_{sa}^{ik} + 1)}^{\binom{\cdot}{\cdot}} \\
 &\quad \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_i+j_{sa})}^{\binom{\cdot}{\cdot}} \sum_{i=l_{sa}+n+s-D}^{l_{sa}+s-l-j_{ik}+1} \\
 &\quad \sum_{n_{is}=n+k}^n \sum_{(n_{ik}=n_{is}-j_{ik}+1)}^{(n_{is}-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-\mathbb{k}_1}^{n_{is}-j_s+1} \\
 &\quad \sum_{n_{ik}=n-j_{sa}+1}^{(n_{ik}+j_{sa}-\mathbb{k}_2)} \sum_{n_{sa}=n_{ik}+j_{sa}-j_i}^{n_{sa}+j^{sa}-j_i} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(n_{is} - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-i}^{l_s+s-l} \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}-\mathbb{k}_1}^{l_s+s-l} \\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}}^{\infty} \\ \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_s - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_s - \mathbf{n} - \mathbb{k} - \mathbb{k}_1 - j_{sa})!} \\ \frac{1}{(j_s - j_{sa} - s)!} \\ \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\ \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge \\ D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge \\ 2 \leq j_s \leq j_{ik} - j_{sa} - 1 \wedge j_s - j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ l_{ik} - j_{sa}^{ik} + s \leq l_s \wedge l_s - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ D > \mathbf{n} \wedge I = \mathbb{k} \geq 0 \wedge \\ j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge \\ \{s, j_{sa}^i - 1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge \\ s \geq 4 \wedge s = s + \mathbb{k} \wedge \\ \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k}$$

$$\sum_{(n_{sa}=n-sa+1)}^{(n_{ik}+j_{ik}-k)} \sum_{n_s=n-j_i}^{n_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s)!}{(l_s - l - 1)!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot \\ \frac{(D - l)!}{(D - j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa}^{ik} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \geq l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k}_1 = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{s-a}, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\left(\right.} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_s+\mathbf{n}+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - j_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_i - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{D}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right. \left.\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_s+j_{sa}-l)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{is}+j_{sa}-j_i}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right. \left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{sa} - j_{sa}^{ik} - 1$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}-\mathbf{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\mathbf{l}_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_{sa}-\mathbf{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(n_i-j_s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_{sa}-\mathbf{l}+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + n - \mathbf{n} - l - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(\mathbf{n} - l - 1)!}{(n - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + \mathbf{n} - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\begin{array}{c} n \\ j_i \end{array}\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(n_i-j_s+1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{\left(\begin{array}{c} n_i-j_s+1 \\ n_{ik} \end{array}\right)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_i-j_s+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} n_i-j_s+1 \\ n_s \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_i-j_s+1}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{(l_s-l+1)} \\ \sum_{k=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+s-j_{sa}} \\ \sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{l_{sa}+n-D-j_{sa}} \sum_{l_{ik}=l_{sa}+n-D-j_{sa}-k}^{l_{sa}-l-i} \sum_{l_i=l_{sa}+n-D-j_{sa}-k}^{l_{sa}-l-i}$$

$$\sum_{j_{ik}=j_s+n-k-1}^n \sum_{(j^{sa}=j_s+j_{sa}-j_{sa}^{ik})}^{(j^{sa}-j_{sa}^{ik})} \sum_{l_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(l_{ik}-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(n_{sa}-j_{sa}^{ik})} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{sa}-j_{sa}^{ik})}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_i - n_s - n_{sa} - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(n_{is} + 3 \cdot j_s - n_{sa} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_l} &= \sum_{k=l}^{(j_{ik}-j_{sa}^{ik})} \sum_{l_s=n-D}^{(j_{ik}-j_{sa}^{ik})} \\
 &\quad \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j^{sa}-j_{sa}+j_{sa}-s) \leq l_i \leq n-D}^{(j_{ik}-j_{sa}^{ik}+j_{sa}-s-l)} \\
 &\quad \sum_{n_s=n-j_{sa}+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n-j_{sa}+1}^{(n_i-j_s+1)} \sum_{n_{lk}=n-j_{sa}+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_i+1}^{(n_i-j_s+1)} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(n_{is} - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{lk} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 &\quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{l_i-l+1} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{} \sum_{j_i=l_s+s-l+1}^{n_i-j_s+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{n_i-j_s+1} \sum_{n_{ik}=n_{is}+j_{ik}-k}^{n_{is}+j_s-j_{ik}-k} \\
& \sum_{(n_{ik}+j_{ik}-k=k_2)}^{(n_{sa}=n_{is}+sa+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_{ik}-1} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - n_{ik} - j_i)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(n_s - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
& \sum_{k=l}^{} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{l_i-s-l} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{} \sum_{j_i=l_i+n-D}^{l_s+s-l}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot$$

$$\frac{(D - s)!}{(D - j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + s - 1 \leq j_i \leq \dots \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa}^{ik} = l_{ik} \wedge j_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - s \wedge$$

$$s, j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa} \wedge$$

$$s \geq \dots \wedge s = s + \mathbb{k} \wedge$$

$$\exists z: z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l - j_{sa}^{ik} + 1)!}{(j_s + l - j_{ik} - l + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\sum_{(l_i+j_{sa}-l-s+1)}} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - 1)!}{(\mathbf{l}_s - \mathbf{l} + 1 - l + 1)! \cdot (l - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_i-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_i-j_s+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, J_{ik}, j^{sa}, j_i} = \sum_{k=l (j_s = l_s + n - D)}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{=l_i + n + j_{sa} - D - s (j_{sa} = j_{sa}^{ik} + j_{sa} - j_{sa}^{ik})}^{l_s + j_{sa}^{ik} - l} \sum_{j_i = j^{sa} + s - j_{sa}}^{(n_i - j_s + 1)} \sum_{i=n+\mathbb{k} (n_{is} = n + \mathbb{k} - j_s + 1)}^n \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\ (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \sum_{(n_{sa} = n - j^{sa} + 1)}^{n_{sa} + j^{sa} - j_i} \sum_{n_s = n - j_i + 1}^{n_{is} + j_{ik} - j_{sa} - 1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{l_s - l + 1} \sum_{(j_s + \mathbf{k} - 1) + \mathbf{n} - D}^{(l_s - l + 1)} \dots$$

$$\sum_{j_{ik} = l_s + j_{sa}^{ik} - l + 1}^{l_i + j_{sa}^{ik} - l - s + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{ik} + \mathbf{k}_1}^{n - j_{sa} + 1} \sum_{j_i = j^{sa} + s - j_{sa}}^{n - j_i + 1}$$

$$\sum_{j_{sa} = n - j^{sa} + 1}^{n - j_{sa} + 1} \sum_{n_s = n - j_i + 1}^{n - j_i + 1} \dots$$

$$\sum_{n_i = n + \mathbf{k}_1 - j_{ik} + \mathbf{k}_2 - 1}^{n - j_s + 1} \sum_{n_{ik} = n + \mathbf{k}_2 - j_{ik} + 1}^{n - j_{ik} - \mathbf{k}_1} \dots$$

$$\sum_{n_{sa} = n - j^{sa} + 1}^{n - j^{sa} + 1} \sum_{n_s = n - j_i + 1}^{n - j_i + 1} \dots$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{l_s+j_{sa}^{ik}-l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j_s=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-1}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}^{ik}}^{()} n_s=n_{sa}+j_{sa}^{ik}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})}^{()} \sum_{n_s=n_{sa}+j_{sa}^{ik}}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - s - l_i - l_s - l_{ik} - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - s - l_i - l_s - l_{ik} - l_{sa} - j_{sa}^{ik})!}.$$

$$\frac{1}{(n_{sa}+j_{sa}^{ik}-j_s-s)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > 2 - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge \mathbb{k} \geq 0 \wedge$$

$$j_s - j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \leq \mathbb{s} \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}^{()}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{} \sum_{k=1}^{(l_s-l+1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2) \cdot (n_i-n_{is}-j_s+1)!}.$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_{is}-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_s-j_s-1)!}{(j_i-j_s-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{} \sum_{k=1}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{} \sum_{k=1}^{(l_s-l+1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_l-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik} + 1)!}{(j_s + j_{sa} - j_{ik} - l_{sa} + 1) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - l_i - 1)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}}^{\mathbf{j}_{ik}-j_{sa}^{ik}+1} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}^{(j_s=j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{} \sum_{j_i=\mathbf{l}_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s) \cdot (j_{ik} - j_s - \mathbf{l}_s + 1)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l}_i)!}{(\mathbf{l}_s - n - \mathbf{k}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{l+1} \sum_{(j_s = l_s + \mathbf{n} - D)}$$

$$\sum_{=j^{sa} + j_{sa}}^n \sum_{(j_i = j_i + j_{sa} - s)}^{()} \sum_{j_i = l_s + s - l + 1}^{l_{sa} + s - l - j_{sa} + 1}$$

$$\sum_{n_i = \mathbf{n} + \mathbf{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbf{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbf{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbf{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbf{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \sum_{l_s=j_s-n+s-D-j_{sa}}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(n_i=j_i+j_{sa}-s)}^{\infty} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - j_{ik} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{\infty} \sum_{(j_s=l_s+n-1)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 &\quad \sum_{j_{ik}=j^{sa}+j_{sa}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_{sa})}^{(l_s+j_{sa}-l)} \sum_{i=j^{sa}+j_{sa}-j_{sa}}^{\infty} \\
 &\quad \sum_{n_i=n+1}^{\infty} \sum_{(n_i-j_s=n-i-k-j_s+1)}^{(n_i-j_s)} \sum_{n_{is}+j_s-j_{ik}=n-1}^{n_i+j_s-j_{ik}-1} \\
 &\quad \sum_{(n_{sa}=n-j_{sa}+1)}^{n_i+j_{ik}-j} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - l_s)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 &\quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

$$\sum_{k=\mathbf{l}}^{\mathbf{(l_s-l+1)}} \sum_{(j_s=l_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\mathbf{(l_{sa}-l+1)}} \sum_{(j^{sa}=l_s+j_{sa}-\mathbf{l}+1)}^{\mathbf{(l_{sa}-l+1)}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2}$$

$$\sum_{(n_{sa}=\mathbf{n}+s-1)}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}-j_i}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i + j_s - n_{ik} - j_i)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{()}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\mathbf{(l_s+j_{sa}-l)}} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{\mathbf{(l_s+j_{sa}-l)}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-i_s}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + s - 1 \leq j_i \leq \dots \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa}^{ik} = l_{ik} \wedge j_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} \wedge$$

$$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}\} \wedge$$

$$s \geq \dots \wedge s = s + \mathbb{k} \wedge$$

$$\exists z : z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k} \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}+j^{sa}-j_i)}} \sum_{n_s=\mathbf{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - l - j_{sa}^{ik} + 1)!}{(j_s + l - j_{ik} - l + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}+j^{sa}-j_i)}} \sum_{n_s=\mathbf{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - l - \mathbf{l} + 1) \cdot (\mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{\substack{j_s=j_{ik}+j_{sa}-j_{sa}^{ik} \\ k=l_{sa}+n+\mathbb{k}-l-D-j_{sa}}}^{l_{sa}+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_s, j_{ik}, j_i} = \sum_{k=l}^{n-D-j_{sa}} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{i=n+\mathbb{k}}^{l_{sa}+j_{sa}-l-j_{sa}+1} \sum_{(j^{sa}=j_i+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{(l_s - 1)} \sum_{i=j_{sa}+n-j_{sa}+1}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{i=j_{sa}+s-j_{sa}}^{j_{ik}-j_{sa}-1} \sum_{i=j_{sa}+s-j_{sa}}^{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{i=n+j_{sa}-1}^{n} \sum_{i=n+\mathbf{k}_2-j_{ik}+1}^{-j_s+1} \sum_{i=n+\mathbf{k}_2-j_{ik}+1}^{n_{ik}=n+\mathbf{k}_2-j_{ik}+1} \sum_{i=n+\mathbf{k}_2-j_{ik}+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}$$

$$\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}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j-\mathbb{k}_2)}^{(\)} n_s=n_{sa}+j^{sa}-j$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s) \cdot (j_i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_s - n - j^{sa} - s - \mathbf{n} - \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} \wedge j_{sa}^{ik} + 1 \leq j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge \mathcal{N} = \mathbb{k} >= \mathbb{k} \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, l_{sa}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s_{sa} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(\right)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_i=l_{ik}+s+n-D-j_{sa}^{ik}}^{l_s+s-l} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \\
& \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{sa}+1) \cdot (n_{is}+j_{ik}-n_{ik}-j_{ik})!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
& \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{(l_s-l+1)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(\right)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_i=l_s+s-l+1}^{l_{ik}+s-l-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

gündüz

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\substack{n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_l)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_{sa} - j_{sa}^{ik} + 1) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_{ik}+s+\mathbf{n}-D-j_{sa}^{ik}}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_s+s-l}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i - 1)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=\mathbf{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}^{(l_s+j_{sa}-l)}$$

$$\sum_{j_{ik}=j_{sa}^{sa}+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j_{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{(l_s+j_{sa}-l)} \sum_{j_i=j_{sa}^{sa}+s-j_{sa}}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j_{sa}^{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{is}+j_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s) \cdot (j_{ik} - j_s - \mathbf{l}_s + 1)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l}_i)!}{(\mathbf{l}_s - n - \mathbf{k}_1) \cdot (n - j_i)!}.$$

$$\sum_{k=l}^{\mathbf{l}+1} \sum_{(j_s = l_s + n - D)}^{l+1}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{lk}}^{(l_{ik} + n - l - j_{sa}^{ik} + 1)} \sum_{l_s + j_{sa} - l + 1} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbf{k}}^n \sum_{(n_{is} = n + \mathbf{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbf{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbf{k}_1}$$

$$\sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbf{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{\substack{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa} \\ j_{ik}=j^{sa}+j_{sa}^{ik}-n_{sa}}} \sum_{\substack{(l_s+j_{sa})! \\ (j^{sa}+j_{sa}^{ik}-n_{sa}-D-j_{sa})!}} \sum_{\substack{i_i=j^{sa}+s-j_{sa} \\ i_i=j^{sa}+s-j_{sa}}} \sum_{\substack{(n_i-i_s+1) \\ (n_i-i_s+1)}} \sum_{\substack{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i \\ n_s=n_{sa}+j^{sa}-j_i}} \sum_{\substack{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)! \\ (3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}}$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{l_s+j_{sa}^{ik}-l} \sum_{(j_s=l_s+n-1)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 &\quad \sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_s)}^{(\)} \sum_{(j_i=j^{sa}-j_{sa})}^{(\)} \\
 &\quad \sum_{n_i=n+\mathbf{m}}^n \sum_{(i_s=i+1)}^{(n_i-j_s)} \sum_{(n_{is}=n-i_s+\mathbb{k}_2-j_{ik}+1)}^{n_{is}+j_s-j_{ik}} \\
 &\quad \sum_{(n_{sa}=n-i_s-\mathbf{q}+1)}^{(n_{sa}-j_{sa}+1)} \sum_{(n_s=n-j_i+1)}^{(j^{sa}-j_i)} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - l_s)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 &\quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

gündin

$$\begin{aligned}
& \sum_{k=l}^{l_s - l + 1} \sum_{(j_s = l_s + n - D)}^{\infty} \\
& \sum_{j_{ik} = l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{\infty} \sum_{j_i = j^{sa} + s - j_{sa}}^{\infty} \\
& \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k} \\
& \sum_{(n_{sa} = n + s - j_{sa} + 1)}^{(n_{ik} + j_{ik} - k)} \sum_{n_s = n - j_i}^{n_{sa} + j^{sa} - j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
& \sum_{k=l}^{l_s + j_{sa}^{ik} - l} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{\infty} \\
& \sum_{j_{ik} = l_{ik} + n - D}^{l_s + j_{sa}^{ik} - l} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{\infty} \sum_{j_i = j^{sa} + s - j_{sa}}^{\infty}
\end{aligned}$$

gündemi

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s)!}{(l_s - l - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot \frac{(D - \mathbf{n})!}{(D - j_i - \mathbf{n})! \cdot (n - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} - s \wedge j_{sa}^{ik} + s - 1 \leq j_i \leq l_s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge j_{sa}^{ik} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - s \wedge$$

$$s, j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa} \wedge$$

$$s \geq \mathbb{k} \wedge s = s + \mathbb{k} \wedge$$

$$\omega_z : z = z_0 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=\mathbf{n}+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right.} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l - j_{sa}^{ik} + 1)!}{(j_s + l - j_{ik} - l + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - \mathbf{l}_s - l + 1) \cdot (\mathbf{l}_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_{ik} + \mathbf{n} - D - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^n \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{\left(\right)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{\left(\right)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{f=1}^{n-D} \sum_{(j_s=l_s+n-D)}^{(l+1)}$$

$$\sum_{i_{ik}=j^{sa}+j_{sa}-j_{sa}}^{n} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=l}^{\infty} \sum_{\substack{() \\ (j_s=j_{ik}-j_{sa}^{ik}+1)}} \sum_{\substack{() \\ (j_i=l_i+n-D)}} \sum_{\substack{() \\ (n_i=n_{ik}+j_{ik}-\mathbb{k}_1)}} \sum_{\substack{() \\ (n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}} \sum_{\substack{() \\ (n_s=n_{sa}+j_{sa}-j_i)}} \sum_{\substack{() \\ (n_{is}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_1-j_{sa})}} \sum_{\substack{() \\ (n_{is}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_1-j_{sa})}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{l_s} \sum_{(l_i = l_s + n - D)}^{(l_s - l + 1)} \\ \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(l_i + j_{sa} - l - s + 1)} \sum_{(j^{sa} = l_i + n - l_s - D - s)}^{(l_i + j_{sa} - l - s + 1)} j_i = j^{sa} + j_{sa}^i \\ \sum_{n+\mathbb{k}}^{n} \sum_{(n_{is} = \mathbb{k} - j_s + 1) \wedge (n_{ik} = j_{ik} + 1)}^{(n_i - j_s + 1)} \sum_{(n_{is} + j_s - j_{ik} - \mathbb{k}_1)}^{(n_i + j_s - j_{ik} - \mathbb{k}_1)} \\ \sum_{a=n-j^{sa}+1}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa} + j^{sa} - j_i} \\ \frac{(n_i - n_{is} - 1)!}{2! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

gündemi

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\begin{aligned} & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{\infty} \sum_{j_i=j^{sa}+s-i}^{\infty} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}-\mathbb{k}_1}^{\infty} \\ & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j_{sa}^s}^{\infty} \\ & \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - i - \mathbf{n} - j_{sa} - \mathbb{k} - j_{sa})!} \cdot \\ & \frac{1}{(j_{sa}^s - j_s - s)!} \cdot \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \end{aligned}$$

$$\begin{aligned} & D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge \\ & D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa} - 1 \wedge j_s - j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa}^{ik} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & l_{ik} - j_{sa}^{ik} + s = l_s \wedge l_s - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D > \mathbf{n} > \mathbf{n} \wedge I = \mathbb{k} \geq 0 \wedge \\ & j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge \\ & \{j_{sa}^i - 1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge \end{aligned}$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{l_s-l+1} \sum_{(j_s=j_s+a-D)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{()} \sum_{j_i=j^{sa}+s-j_{sa}} \\ & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k} \\ & \sum_{(n_{ik}+j_{ik}-s+1)}^{(n_{ik}+j_{ik}-s+1)} \sum_{(n_{sa}=n-sa+1)}^{n_{sa}+j^{sa}-j_i} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \end{aligned}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=l}^{l_s+j_{sa}^{ik}-l} \sum_{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{()} \sum_{j_i=j^{sa}+s-j_{sa}} \\ & (j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}) \end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{()}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} n_s=n_{sa}+j^{sa}-i_s$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s)!}{(l_s - l - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot \frac{(D - \mathbf{n})!}{(D - j_i - \mathbf{n} + s - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa}^{ik} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{K}_1 = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s, \mathbb{K}_1, j_{sa}^{ik}, \mathbb{K}_2, j_{sa}^{s-a}, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{K}_z: z \geq 2 \wedge \mathbb{k} = z - \mathbb{K}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{l_{sa}+s-l-j_{sa}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_{sa}+s-l-j_{sa}+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - j_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \quad \sum_{k=\mathbf{l}}^{\left(\right.} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left.\right)} \\
& \quad \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right.} \sum_{j_i=\mathbf{l}_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_s+s-\mathbf{l}} \\
& \quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_s+s-\mathbf{l}} \\
& \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left.\right)}
\end{aligned}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{is} = j_{sa}^{ik} - 1$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_{is}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - l - \mathbf{l} + 1) \cdot (\mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{il}=s_a+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{\mathbf{n}+l-k, j_{ik}, j^{sa}, j_s} = \sum_{i=l}^{n-k} \sum_{(j_s = l_s + n - D)}^{(j_s = l_s + l + 1)}$$

$$\sum_{\substack{j_{ik} = l_{sa} + j_{sa}^{ik} - j_{sa} + 1 \\ j_{ik} = l_{sa} + j_{sa}^{ik} - D - j_{sa}}}^{l_{sa} + j_{sa}^{ik} - j_{sa} + 1} \sum_{\substack{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}) \\ j_i = j^{sa} + s - j_{sa}}}^{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{j_s=l}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_s+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_s-j_{sa}^{ik}+s-j_{sa}} \dots$$

$$\sum_{n_{is}=n+j_s-j_{sa}^{ik}-\mathbb{k}_1}^n \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i} \dots$$

$$\frac{(3 \cdot n_{is} + 2 \cdot n_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$> n > \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=l}^{l_s-l+1} \sum_{(j_s=j_{sa}+n-D)}^{(l_s-l+1)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(i+j_{sa}-s) \leq j_i \leq n+s-D-j_{sa}}^{l_{ik}+s-1} \\
& \sum_{n_i=n+1}^{\infty} \sum_{n_{is}=n+\mathbb{k}-j_{sa}+1}^{n_{ik}-\mathbb{k}_1} n_{ik}=n+\mathbb{k}_2-j_{ik}+1 \\
& \sum_{j_{sa}=n-j^{sa}+1}^{\infty} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(\mathbf{j}_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_{ik}+s+n-D-\mathbf{n}}^{l_s+s-l} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}-\mathbb{k}_1}^{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \\
& \sum_{n_s=n_{sa}+j_{sa}^s}^{\infty} \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - \mathbf{n} - \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot \\
& \quad \frac{1}{(j_{sa}^s - j_s - s)!} \cdot \\
& \quad \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \\
& D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge \\
& D + l_s + s - n - l_i + \mathbb{k} - 1 \leq l \leq D - \mathbf{n} + 1 \wedge \\
& 2 \leq j_s \leq j_{ik} - j_{sa} - 1 \wedge j_s - j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
& j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\
& l_{ik} - j_{sa}^{ik} + s - l_s \wedge l_s - j_{sa}^{ik} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
& D > \mathbf{n} - n \wedge I = \mathbb{k} \geq 0 \wedge \\
& j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge \\
& \{j_{sa}^i - 1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge \\
& s \geq 4 \wedge s = s + \mathbb{k} \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow
\end{aligned}$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}$$

$$\begin{aligned} & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^{\infty} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_i} \\ & \sum_{(n_{ik}+j_{ik}-j_i-1)}^{(n_{sa}=n_{is}-j_{sa}+1)} \sum_{n_{sa}=j_{sa}-j_i}^{n_s-\mathbf{n}-j_{ik}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_s - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{()}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} n_s=n_{sa}+j^{sa}-i_s$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}.$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n & I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^s, j_i, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} j_i=j^{sa}+s-j_{sa}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_{is} - 1)!}{(j_{is} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_{is} - j_{is})!} \cdot$$

$$\frac{(n_s - n_{is} - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D + j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{l}_s+j_{sa}^{ik}-\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=\mathbf{l}_{ik}+\mathbf{n}-D}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i + j_{sa} - s \leq n \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=\mathbf{l}_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{ik}+s-\mathbf{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_i - l - 1)!}{(\mathbf{l}_s - l - l + 1) \cdot (\mathbf{l}_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - l_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_i - l_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - l_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + \mathbf{l}_s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=\mathbf{l}_{ik}+\mathbf{n}-D}^{l-1} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(l_{sa}-l+1)} \sum_{j_i=\mathbf{l}_{ik}+s-l-j_{sa}^{ik}+2}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - s)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - j_{sa})!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_{sa} - s)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{\mathbf{n} - \mathbf{l}_i \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{l=1}^{\mathbf{l}_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\mathbf{l}_i} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\mathbf{l}_s - \mathbf{l} - 1)!}$$

$$\frac{3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(2 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f(z) &= \sum_{i=1}^{l_s+s-l} \sum_{j_i=l_i+n-D}^{n-i} \sum_{n_i=n+\mathbb{k}}^{n_i=s-j_s+1} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ &\quad \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ &\quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \end{aligned}$$

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$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{l_s + j_{sa}^{ik} - l} \sum_{\substack{j_s = j_{ik} \\ j_{ik} + n + j_{sa}^{ik}}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{\substack{j_i = l_s + s - l + 1 \\ j_i + n + j_{sa}^{ik} - l + 1}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{\substack{j_{ik} = l_s + n + j_{sa}^{ik} \\ j_{sa} = l_{sa} + n + j_{sa}^{ik}}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{\substack{n_i = n + j_{sa}^{ik} - l + 1 \\ n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{\substack{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1 \\ n_{sa} = n - j^{sa} + 1}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{\substack{n_s = n - j_i + 1 \\ n_{sa} + j^{sa} - j_i}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{\substack{n_i = n + j_{sa}^{ik} - l + 1 \\ n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{\substack{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1 \\ n_{sa} = n - j^{sa} + 1}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{\substack{n_s = n - j_i + 1 \\ n_{sa} + j^{sa} - j_i}}^{\left(\begin{array}{c} \\ \end{array}\right)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{l_i+n-D}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-j_i-\mathbb{k}_1}^{n_i-j_s+1}$$

$$\sum_{(n_{sa}=n_{is}+j_{ik}-j^{sa}+1)}^{\infty} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - s - \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s = D - \mathbf{n} - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$< j^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, l_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}+j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}+1)}^{(n_{ik}+j_{ik}-\mathbb{k})} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - n_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_l=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=n-j_i+1}^{n_{sa}+j^{sa}-j_{sa}}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{im}-1)!}{(j_{ik}-j_{sa}+1) \cdot (n_{is}+j_{sa}-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{im}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_{is} - 1)!}{(j_{is} - j^{sa} - 1)! \cdot (n_{sa} + j_{is} - n_{is} - j_i)!} \cdot$$

$$\frac{(n_s - n_{is} - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D + j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left.\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\begin{aligned} & \frac{1}{(\mathbf{n} + j_{sa}^s - j_s - l)^!} \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\ & \frac{(D - l)^!}{(D + j_{ik}) \cdot (\mathbf{n} - l_i)^! \cdot (n - j_i)^!} \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > j_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\left(\right.} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left.\right)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + l - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(n - l - 1)!}{(l_s - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + l_s - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - n_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{i}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-l}^{j_{sa}^{ik}-l} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{\substack{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa} \\ =n+\mathbb{k}}} \sum_{\substack{(j^{sa}=n+\mathbb{k}-j_s+1) \\ (j_{sa}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}} \sum_{\substack{j_i=j^{sa}+s-j_{sa} \\ =n-\mathbb{k}}}$$

$$\sum_{\substack{(n_i-s-1) \\ =n+\mathbb{k}}} \sum_{\substack{(n_{is}=n+\mathbb{k}-j_s+1) \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}}$$

$$\sum_{\substack{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_s=n_{sa}+j^{sa}-j_i)}} \sum_{\substack{(n_i-s-1) \\ =n+\mathbb{k}}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot n_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot n_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{l_i+n-j_{sa}^{ik}-D-s-1} \sum_{(j_{sa}=l_{sa})}^{(l_{sa}-1)} \sum_{n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n-\mathbb{k}-j_s+1)}^{(n_i-j_{sa}^{ik})} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_i-j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j_{sa}^{ik} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{\substack{() \\ j_s=j_{ik}-j_{sa}^{ik}+}}^{\substack{() \\ l_{sa}-l+1}} \sum_{\substack{() \\ j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}}^{\substack{() \\ (j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}-j_{sa})-l+1}} \sum_{\substack{() \\ n_i=n+\mathbb{k}_1-\mathbb{k}_2-j_{ik}+1}}^{\substack{() \\ (n_i-j_s+j_{ik}-1)+1}} \sum_{\substack{() \\ n_{is}+j_s-j_{ik}}}^{\substack{() \\ n_{is}+j_s-j_{ik}}} \sum_{\substack{() \\ (n_{sa}=n-j_i+1)}}^{\substack{() \\ (n_{sa}+j_{ik}-j^{sa}-\mathbb{k}_2-j_{ik}-j_{sa})-j_i}} \sum_{\substack{() \\ n_s=n-j_i+1}}^{\substack{() \\ (n_{sa}-n_{is}-1)+1}} \frac{(n_i - n_{is} - 1)!}{(j_s - n_{is} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_{ik}-l+1} \sum_{(j_s=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}^{ik}}^{(\)}$$

$$\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}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}^{(\)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j_{sa}^s}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - \mathbf{n} - \mathbb{k} - j_{sa}^s - \mathbb{k}_1 - j_{sa})!} \cdot$$

$$\frac{1}{(j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge \mathbb{k} = \mathbb{k} > \mathbb{k}_0 \wedge$$

$$j_{sa}^s - j_{sa}^{i-1} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, i, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s - j_{sa}^s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=n-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{sa}-1) \cdot (n_{is}+j_{sa}-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_{ik}-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{\left(\right.} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left.\right)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

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$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - n_{is} - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_{is} - j_i)!} \cdot \\
& \quad \frac{(n_s - n_{is} - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D + j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \quad \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \quad \sum_{k=\mathbf{l}}^{\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)} \\
& \quad \sum_{j_{ik}=\mathbf{l}_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{\mathbf{l}_s+j_{sa}^{ik}-\mathbf{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \quad \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i} (3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)! \\ (3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - l)^!} \\ \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\ \frac{(D - l)^!}{(D + j_{ik}) \cdot (\mathbf{n} - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{is} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > j_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+\mathbf{n}-D-s)} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_i+\mathbf{n}-D-s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + n - l - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(n - l - 1)!}{(l_s - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} + j_{sa} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{l}_i - 1)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{l}_{ik}-\mathbf{l}-j_{sa}^{ik}+2} \sum_{(j_s=\mathbf{l}_t+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=s+j_{sa}^{ik}-1}^n \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s, j_{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}^{(j_i+n-D-s)}$$

$$\sum_{i_k=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_{sa}-1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{(j_s = l_i + n - D - s)}^{(l_s - 1)} \dots$$

$$\sum_{(j_{ik} = j_s + n - l + 1)}^{(l_{sa} - l + 1)} \dots$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = n_i - \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \dots$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{l}_s - \mathbf{l} + 1} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_s - l + 1)} \\ \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(j^{sa} = j_{ik} + j_{sa} - s + 1)} \sum_{(j_i = j^{sa} - j_{sa} - s + 1)}^{(n_i - j_s + 1)} \\ \sum_{n_i = n + \mathbb{k} - (j_s - l_i + 1)}^{n} \sum_{n_{ik} = j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s + 1)} \\ \sum_{(n_{sa} - j_{sa} + j_{ik} - j^{sa} - s + 1)}^{(n_s = n_{sa} + j^{sa} - j_i)} \\ \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_i - n_s - j^{sa} + s - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_i - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{l} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{l} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \cdot j_s - j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^s \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{\binom{l}{s}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
&\quad \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{(j_i=n-D)}^{l_i-l+1} \\
&\quad \sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-1)}^{(n_i-j_s+1)} n_{ik}=n+\mathbb{k}_2-j_{ik}-1 \\
&\quad \sum_{(n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_1)} \sum_{(n_{sa}+j^{sa}-j_t)}^{(n_{is}+j_s-\mathbb{k}_1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
&\quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\quad \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
&\quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -
\end{aligned}$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_i+n-p}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}^{ik}+1}^{n_i-j_s+1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}+1}^{n_i-j_s+1} n_s=n_{sa}+j^{sa}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}+1)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}+1}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - s - l_i - l_{ik} - l_{sa})!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - l_{ik} - l_{sa})!}.$$

$$\frac{1}{(j_s + j_{sa}^{ik} - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - l_i - l_{ik} - l_{sa} \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + s - l_s \wedge l_{ik} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq l_i - \mathbf{n} \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s. \{ j_{sa}^{ik} - 1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i \} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-i-k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_n}$$

$$\sum_{(n_{ik}+j_{ik}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}+1)} n_{sa} + j_{sa} - j_i$$

$$(n_{sa}=n-j_{sa}+1) \quad n_s=n-j_i$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_s - j_i + 1)!}.$$

$$\frac{(n_{is} - j_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(-j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_l=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-s}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-\mathbb{k}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} - n_{sa} - j_s - s)!}$$

$$\frac{(l_s)}{(l_s - l - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i)}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + s \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq j_s \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j_{ik} - s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = s \wedge l_{sa} + j_{sa}^{ik} - j_s = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = \mathbb{k} + \mathbb{k} \wedge$$

$$\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{\left(l_{sa}-l+1\right)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_i-l+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{\left(n_i-j_s+1\right)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{\left(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)} \sum_{j_i=n-j_i+1}^{n_{sa}+j^{sa}} \\
& \frac{\left(n_i-1\right)!}{\left(j_s-2\right)!\cdot\left(n_i-n_{is}-1\right)!} \\
& \frac{\left(n_{is}-n_{in}-1\right)!}{\left(j_{ik}-j_{ik}+1\right)!\cdot\left(n_{is}+j_{is}-n_{ik}-j_{ik}\right)!} \\
& \frac{\left(n_{in}-n_{sa}-1\right)!}{\left(j^{sa}-j_{ik}+1\right)!\cdot\left(n_{is}+j_{ik}-n_{sa}-j^{sa}\right)!} \\
& \frac{\left(n_{sa}-n_s-1\right)!}{\left(j_i-j^{sa}-1\right)!\cdot\left(n_{sa}+j^{sa}-n_s-j_i\right)!} \\
& \frac{\left(n_s-1\right)!}{\left(n_s+j_i-\mathbf{n}-1\right)!\cdot\left(\mathbf{n}-j_i\right)!} \\
& \frac{\left(l_s-l-1\right)!}{\left(l_s-j_s-\mathbf{l}+1\right)!\cdot\left(j_s-2\right)!} \\
& \frac{\left(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa}\right)!}{\left(j_{ik}+l_{sa}-j^{sa}-l_{ik}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!} \\
& \frac{\left(l_i+j_{sa}-l_{sa}-s\right)!}{\left(j^{sa}+l_i-j_i-l_{sa}\right)!\cdot\left(j_i+j_{sa}-j^{sa}-s\right)!} \\
& \frac{\left(D-l_i\right)!}{\left(D+j_i-\mathbf{n}-l_i\right)!\cdot\left(\mathbf{n}-j_i\right)!} - \\
& \sum_{k=\mathbf{l}}^{\left(l_{ik}-l-j_{sa}^{ik}+2\right)} \sum_{\left(j_s=l_i+\mathbf{n}-D-s+1\right)}^{\left(\right)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\left(\right)}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot$$

$$\frac{(D - \mathbf{n})!}{(D - j_i - \mathbf{n})! \cdot (n - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + s - 1 \leq j_i \leq \dots \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge j_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} \wedge$$

$$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq \dots \wedge s = s + \mathbb{k} \wedge$$

$$\exists z : z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k} \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_s+s-l} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\mathbf{n}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l - j_{sa}^{ik} + 1)!}{(j_s + l - j_{ik} - l + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l} + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_s + \mathbf{n} - D)}^{(l_s - l + 1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\mathbf{n}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - n - 1)!}{(n_s + n - l - 1)! \cdot (n - j_i)!}.$$

$$\frac{(n - l - 1)!}{(l_s - l - 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa} + s)!}{(j_s + l_{ik} - l_s - l_s)! \cdot (l_{ik} - j_s - j_{sa} + 1)!}.$$

$$\frac{(l_i - l_{sa} - l_{sa} - s)!}{(l_i + l_{sa} - l_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)} \quad$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_s+s-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^n$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{i,k,l,s,a,j_{sa},j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}$$

$$\sum_{i=k+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_{sa} - s)!}.$$

$$\frac{(\mathbf{l}_i - l_i)!}{(l_i - n - \mathbf{l}_i)! \cdot (n - j_i)!}.$$

$$\sum_{k=l}^{\mathbf{l}_s} \sum_{(j_s = l_s + n - D)}^{(j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = n + \mathbb{k} + j_{sa}^{ik} - j_{sa}}^{(l_s - j_{sa} - l)} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=l}^{(\mathbf{l}_{ik}-l+1)} \sum_{(j_s=\mathbf{l}_s+n-k+1)}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}-j_{ik}}^{n_{is}+j_{sa}-l+1} \sum_{(j^{sa}+j_{sa}-l+1)-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1} \sum_{l_i-l+1}^{n_{is}+j_s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbf{k}}^n \sum_{(n_{is}=n-\mathbf{k}-j_s+1)}^{(n_i-j_s+1)-j_{ik}+1} \sum_{n_{ik}=\mathbf{n}+\mathbf{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1} \\ \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{n_{is}+j_{sa}-j^{sa}-\mathbf{k}_2} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-j_{sa}+j_{ik}-j_{sa})}^{\infty}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}(n_i-\mathbf{l}_i)+1}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i+j_s-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}=n_{sa}+j_{ik}-j^{sa}-s)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_i - n_s - j^{sa} + s - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_i - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} > \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{l} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_{ik}-\mathbb{k}_1}^{n_{is}+j_{ik}-\mathbb{k}_1+1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2+1)} \sum_{n_{sa}+j_{sa}-j_i}^{n_{sa}+j_{sa}-j_i+1}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_i - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-\mathbf{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-\mathbf{l}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_i-j_s+1)!}{(j_s-2) \cdot (n_i-n_{is}-j_s+1)!}.$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_{is}-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=\mathbf{l}}^{l_s-l+1} \sum_{(j_s=l_s+n-D)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-\mathbf{l}+1}^{l_{ik}-\mathbf{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-\mathbf{l}+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - j_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D + j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \quad \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \quad \sum_{k=\mathbf{l}}^{\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)} \\
& \quad \sum_{j_{ik}=\mathbf{l}_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{\mathbf{l}_s+j_{sa}^{ik}-\mathbf{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left.\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\begin{aligned} & \frac{1}{(n + j_{sa}^s - j_s - l)^!} \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\ & \frac{(D - l)^!}{(D + j_{ik}) \cdot (n - l_i)^! \cdot (n - j_i)^!} \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > j_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right.} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)} \sum_{n_{sa}+j^{sa}-j_i}^{\left(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n_s - j_i)!} \cdot$$

$$\frac{(n - l - 1)!}{(l_i - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - l_s - l_s)! \cdot (l_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(l_i - l_{sa} - l_{sa} - s)!}{(l_i + l_{sa} - l_{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{l_i-l+1}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{l} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - \mathbf{l}_s + 1)!} \cdot$$

$$\frac{(\mathbf{l}_s + j_{sa} - l_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{(l_s-l+1)} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^n \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{j_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}-j_{sa}^{ik}} \sum_{(j_{ik}=j^{sa}+n-D)} \sum_{(j_s=l_s+n-D)}^{(l_{sa}-l+1)} \sum_{(j_i=l_i+n-D)}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{j_{ik}=j_s+j_{sa}-j_{sa}^{ik} \\ j_{ik}=j_i+j_{sa}-s}} \sum_{\substack{j_a=j_i+j_{sa}-s \\ j_a=j_s+j^{sa}-j_i}} \sum_{\substack{j_t=j_i+n-D \\ j_t=j_s+j^{sa}-j_i}}$$

$$\sum_{\substack{n+\mathbb{k} \\ (n_{is}=n+j_s-j_{sa}^{ik}-1)}}^n \sum_{\substack{-j_s+1) \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}} \sum_{\substack{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_s=n_{sa}+j^{sa}-j_i}}$$

$$\frac{(3 \cdot n_{is} + \Delta^{ik} - n_s - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(n_{is} + 3 \cdot j_s - n_s - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D > \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_l} = \sum_{k=l}^{j_{ik}} \sum_{l_s=n-D}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_i=l_i+n-D}^{j^{sa}-s-l} \sum_{j_l=l_l+n-D}^{j_{ik}-j_{sa}}$$

$$\sum_{n_s=n-j_{sa}+1}^{n_i-j_{sa}+1} \sum_{n_{ik}=n-j_{sa}+1}^{n_i-j_{sa}-\mathbb{k}_1} \sum_{n_{ik}+j_{ik}-\mathbb{k}_1=n_{ik}+j_{ik}-\mathbb{k}_1}^{n_{ik}+j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j^{sa}-j_i} \sum_{n_l=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(n_{is} - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{l_s=s-l+1}^{l_i-l+1} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+i_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-i_k+1}^{n_{is}+\mathbb{i}_k-\mathbb{k}_1} \\ & \sum_{(n_{sa}=s-a+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=n-j_i+1}^{n_{sa}+j^{sa}} \\ & \frac{(n_i-n_{is}-1)!}{(-2)! \cdots (-n_{is}-j_s+1)!} \cdot \\ & \frac{(n_i-n_{ik}-1)!}{(-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ & \frac{(n_i-n_{ik}-n_{sa}-1)!}{(-j_{ik}-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\ & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \end{aligned}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_i+n-s}^{l_s+s-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}-k_1}^{n_i-j_s+1} n_s=n_{sa}+j^{sa}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - l - k - k_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - n - l - k - k_1 - j_{sa})!}.$$

$$\frac{1}{(l_s - l - 1)! \cdot (j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - l - 1)! \cdot (j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge k > n - D \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, i, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \leq j_{sa}^s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{sa}+1) \cdot (n_{is}+j_{is}-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{is}-n_{sa}-1)}{(j^{sa}-j_{ik}+1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - 1)!}{(j_s - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \quad \sum_{k=\mathbf{l}}^{\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)} \\
& \quad \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\mathbf{l}_s+j_{sa}-\mathbf{l})} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{(\mathbf{l}_s+j_{sa}-\mathbf{l})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left.\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\begin{aligned} & \frac{1}{(\mathbf{n} + j_{sa}^s - j_s - l)^!} \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\ & \frac{(D - 1)!}{(D + j_{ik}) \cdot (\mathbf{n} - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = j_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{n}+n-D)}^{(j_s=j_{sa}^{ik}-1)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_i+\mathbf{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_{is}-j_s+s-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + n - l - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(n - l - 1)!}{(l_s - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^ik + 1)!}{(j_s + l_{ik} - l_s - l_s) \cdot (l_{ik} - j_s - j_{sa}^ik + 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik}) \cdot (j^{sa} + j_{sa}^ik - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(j_{ik}-j_{sa}^ik+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^ik-D-s}^{l_s+j_{sa}^ik-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^ik)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - \mathbf{l}_s - l + 1) \cdot (\mathbf{l}_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(j_s + j_{sa} - l_{ik} - j_{ik} + j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_s + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + \mathbf{l}_s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{l_s-l+1} \sum_{(j_s=l_s+n-D)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_i-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{ik})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{j_s = j_{ik} - j_{sa}^{ik} + 1}} \sum_{\substack{(l_s - j_{sa}^{ik} - l)}} \sum_{\substack{(n_i - j_s + 1)}} \sum_{\substack{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}} \sum_{\substack{(n_s = n_{sa} + j^{sa} - j_i)}} \sum_{\substack{(n_{is} = n_{ik} + j_{ik} - j_s + 1)}} \sum_{\substack{(n_i = n_{is} + j_s - j_{ik} - \mathbb{k}_1)}} \sum_{\substack{(j_i = j^{sa} + s - j_{sa})}}$$

$$\sum_{\substack{j_{ik} = j_{sa}^{ik} + j_{sa}^{ik} - l - s}} \sum_{\substack{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}} \sum_{\substack{(j_i = j^{sa} + s - j_{sa})}} \sum_{\substack{(n_i = n + \mathbb{k})}} \sum_{\substack{(n_{is} = n + \mathbb{k} - j_s + 1)}} \sum_{\substack{(n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1)}} \sum_{\substack{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}} \sum_{\substack{(n_s = n_{sa} + j^{sa} - j_i)}} \sum_{\substack{(n_{is} = n_{ik} + j_{ik} - j_s + 1)}} \sum_{\substack{(n_i = n_{is} + j_s - j_{ik} - \mathbb{k}_1)}} \sum_{\substack{(j_i = j^{sa} + s - j_{sa})}}$$

$$\sum_{\substack{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}} \sum_{\substack{(n_s = n_{sa} + j^{sa} - j_i)}} \sum_{\substack{(n_{is} = n_{ik} + j_{ik} - j_s + 1)}} \sum_{\substack{(n_i = n_{is} + j_s - j_{ik} - \mathbb{k}_1)}} \sum_{\substack{(j_i = j^{sa} + s - j_{sa})}} \sum_{\substack{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}} \sum_{\substack{(n_s = n_{sa} + j^{sa} - j_i)}} \sum_{\substack{(n_{is} = n_{ik} + j_{ik} - j_s + 1)}} \sum_{\substack{(n_i = n_{is} + j_s - j_{ik} - \mathbb{k}_1)}} \sum_{\substack{(j_i = j^{sa} + s - j_{sa})}}$$

$$\frac{3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{\substack{j_{ik}+n-D \leq j_{sa} \leq j_i \\ j_{sa} \leq j^{sa} \leq j_i}} \sum_{\substack{i=k+1 \\ i \neq l \\ l \neq k}} \sum_{\substack{(l_i+n-D-1) \\ \leq l_{ik}-l+1 \leq (l_i+j_{sa})-s+1 \\ = l_{ik}+n-D \\ (j^{sa} \leq j_{sa}+n+j_{sa}-D-s)}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{\substack{n_i=n+\mathbb{k} \\ n_{is}=n+\mathbb{k}-j_s+1}} \sum_{\substack{(n_i-j_s+1) \\ (n_{is}-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ n_{ik}=n+\mathbb{k}_2-j_{ik}+1}}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=n-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{\substack{i_1 = l_i + n - s + 1 \\ i_2 = l_i + n - s + 1}}^{\substack{-l+1 \\ -l+1}} \sum_{\substack{j_{ik} = j_s + j_{sa}^{ik} \\ i_{ik} + j_{sa} - j_s = i_i = j^{sa} + s - j_{sa}}}^{\substack{l_{ik}-l+1 \\ (l_i + j_s) - l - s + 1 \\ i_i = j^{sa} + s - j_{sa}}} \sum_{\substack{n_i = n + \mathbf{k}_1 - j_{ik} + 1 \\ n_{ik} = n + \mathbf{k}_2 - j_{ik} + 1 \\ n_{sa} = n - j^{sa} + 1}}^{\substack{-j_s + 1 \\ -j_s + 1 \\ n_{sa} + j^{sa} - j_i}}$$

$$\sum_{\substack{n_{sa} = n - j^{sa} + 1 \\ n_s = n - j_i + 1}}^{\substack{-j_{ik} - \mathbf{k}_1 \\ -j_{ik} - \mathbf{k}_2 \\ n_{sa} + j^{sa} - j_i}} \sum_{\substack{n_i = n + \mathbf{k}_1 - j_{ik} + 1 \\ n_{ik} = n + \mathbf{k}_2 - j_{ik} + 1 \\ n_{sa} = n - j^{sa} + 1}}^{\substack{-j_s + 1 \\ -j_s + 1 \\ n_{sa} + j^{sa} - j_i}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\mathbf{l}} \sum_{(j_s = l_i + \mathbf{n} - D - s + 1)}^{(l_s - l + 1)} \sum_{(j_{ik} = j_s + j_{sa}^{ik} - 1)}^{()} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa})}^{()} \sum_{(n_i = \mathbf{n} + \mathbb{k} (n_{sa} - j_{sa} + s - 1) + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n_i + j_s - j_{ik} - \mathbb{k}_1)}^{()} \sum_{(n_{sa} = n_i + j_{ik} - j^{sa} - 1)}^{()} \sum_{(n_s = n_{sa} + j^{sa} - j_i)}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_s - n_{sa} - j^{sa} - s - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_s - n_{sa} - j^{sa} - j_{sa} - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - j_s + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1, n_{sa}=n+\mathbb{k}-j_{sa}+1)}^{(n_i-j_s+1)} \sum_{j_{ik}=l_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1} \sum_{j_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2}^{n_{sa}+j_{sa}-j_i}$$

$$\sum_{n_{sa}=n-j_{sa}+1}^{n_s=n-j_i+1} \sum_{n_s=n-j_i+1}^{(n_i-n_{is})} \frac{(n_i-n_{is})}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot$$

$$\frac{(n_i-n_{ik})}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot$$

$$\frac{(n_i-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-\mathbf{l}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_i=l_s+s-\mathbf{l}+1}^{l_{sa}+s-\mathbf{l}-j_{sa}+1}$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{lk}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=j-n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-\mathbf{l}+1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{lk}-1)!}{(j_{ik}-j_{sa}+1) \cdot (n_{is}+j_{sa}-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{lk}-n_{sa}-1)!}{(j^{sa}-j_{lk}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_s+s-\mathbf{l}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()} \\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-i_s}^{()} \\ \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot (3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}{(n_{is} - n_{sa} - n_s - n - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge \\ 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge \\ j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} \wedge j^{sa} + s - j_{sa}^{ik} \leq j_i \leq \\ l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge j_{sa}^{ik} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} \wedge \\ s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}\} \wedge$$

$$s \geq \dots \wedge s = s + \mathbb{k} \wedge$$

$$\exists z : z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k} \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}+j^{sa}-j_i)}} \sum_{n_s=\mathbf{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_l)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik} + 1)!}{(j_s + l_{sa} - j_{ik} - l_{sa} + 1) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}+j^{sa}-j_i)}} \sum_{n_s=\mathbf{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n_s - j_i)!} \cdot$$

$$\frac{(n - l - 1)!}{(n - l_s - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_{sa} - j_{sa} + j_{ik})!}{(j_s + l_{ik} - l_{sa} - l_s) \cdot (l_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik}) \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_{sa}+n-D)}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^{\infty}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{i,k,l,s,a,j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}$$

$$\sum_{i_k=l_{ik}+n-D}^{l_{sa}+n-\mathbf{l}+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{j^{sa}-D-j_{sa}-1} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_{sa}-l+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{ik} + 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa} + 1)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(n - \mathbf{l}_i) \cdot (\mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{l=1}^{\mathbf{l}_s + j_{sa}^{ik} - l} \sum_{(j_s = \mathbf{l}_s + \mathbf{n} - D)}^{(n - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = l_{sa} + j_{sa}^{ik} - D - j_{sa}}^{l_{sa} + j_{sa}^{ik} - l} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(n - l + 1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{\substack{j_{ik} = l_i + 1 \\ j_{sa} = l_s + j_{sa}^{ik} - l + 1}}^{\mathbf{l}_{ik} - l + 1} \sum_{\substack{j^{sa} = l_s + 1 \\ j_{sa} = l_{sa} - 1}}^{\mathbf{l}_{sa} - 1} \sum_{\substack{j_i = j^{sa} + s - j_{sa} \\ n_i = \mathbf{n} + \mathbb{k}}}^{\mathbf{l}_i - l + 1}$$

$$\sum_{\substack{n_{is} = \mathbf{n} + \mathbb{k} \\ n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1}}^{\mathbf{n} - j_s + 1} \sum_{\substack{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1 \\ n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}}^{\mathbf{n} - j_{ik} + 1}$$

$$\sum_{\substack{(n_{sa} = \mathbf{n} - j^{sa} + 1) \\ n_s = \mathbf{n} - j_i + 1}}^{(n_{sa} - j^{sa} + 1)} \sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ n_{sa} + j^{sa} - j_i}}^{(n_{is} - j_s + 1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_s \\ j_{ik} \leq l_{sa}+n+k-j_s \\ j_{ik} \leq n_{is}+j_s-j_{ik}-\mathbb{k}_1}}^{\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_s}^{l_s+j_{sa}^{ik}-l}} \sum_{\substack{j_{sa}=j_{ik}+j_{sa}^{ik}+1 \\ j_{sa} \leq n_{is}+j_s-j_{ik}-\mathbb{k}_1}}^{\sum_{j_{sa}=j_{ik}+j_{sa}^{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}} \sum_{\substack{n_i=n+\mathbb{k}(n_{is}+n+\mathbb{k}-j_s)+1 \\ n_i \leq n_{is}+j_s-j_{ik}-\mathbb{k}_1}}^{\sum_{n_i=n+\mathbb{k}(n_{is}+n+\mathbb{k}-j_s)+1}^{(n_{is}+n+\mathbb{k}-j_s)+1}} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i \\ n_s \leq n_{sa}+j^{sa}-j_i}}^{\sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_{sa}+j^{sa}-j_i}} \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D < \mathbf{n} < \mathbf{l} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_s+n-D)}^{(l_{sa}-l+1)} \\
&\quad \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}-s+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}-s-j_{sa}} \\
&\quad \sum_{n_i=n+j_{sa}+1}^n \sum_{(n_i-n_{ik}-1)}^{(n_i-j_{ik}+1)} \sum_{n_{is}=n+k_2-j_{ik}+1}^{n_{is}+j_s-n-k_1} \\
&\quad \sum_{(n_{sa}=n-sa+1)}^{(n_{sa}-s+1)} \sum_{n_s=n-j_i+1}^{n_s+j^{sa}-j_i} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - n_i)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(-j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
&\quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
&\quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
\end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(l_s-l-1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_i} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}} \\
 & \sum_{(n_{sa}=\mathbf{n}-j_{sa}+1)}^{(n_{ik}+j_{ik}-\mathbb{k})} \sum_{n_s=\mathbf{n}-j_i}^{n_{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(n_s - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
 & \sum_{k=l}^{l_s-l-1} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(l_s-l-1)}
 \end{aligned}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-\mathbb{k}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - (j_{sa}^s)!)}$$

$$\frac{1}{(\mathbf{n} - l_s - j_s - s)!}$$

$$\frac{(l_s - l + 1)! \cdot (j_s - 2)!}{(l_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + s \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq \mathbf{n} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} - j_i + j_{sa} - s \wedge j_{ik} - s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > \mathbf{n} \wedge l_{sa} + j_{sa}^{ik} - j_s = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = \mathbb{k} + \mathbb{k} \wedge$$

$$\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=\bar{l}_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_l=l_i+\mathbf{n}-D}^{l_i-l+1}$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{lk}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{lk}-1)!}{(j_{ik}-j_{sa}+1) \cdot (n_{is}+j_{sa}-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{lk}-n_{sa}-1)!}{(j^{sa}-j_{lk}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=l}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(\right)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_l=l_i+\mathbf{n}-D}^{l_s+s-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s)!}{(l_s - l - 1)!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot \\ \frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} +$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k}_1 = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - j_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{sa} - j_i)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \quad \sum_{k=\mathbf{l}}^{\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\mathbf{l}} \\
& \quad \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(\mathbf{l}_s+j_{sa}-\mathbf{l})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(n + j_{sa}^s - j_s - l)^!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l + 1)!}{(D + j_{ik} - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - 1 \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - l_{ik} \wedge l_i - j_{sa} - s = j_i \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^i = j_{sa}^{ik} - 1$$

$$s: \{j_s^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \neq 4 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_{z+1} = 2 \wedge \mathbb{k} = \mathbb{k}_1 - \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik} + 1)!}{(j_s + l_{sa} - j_{ik} - l_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\left(\right. \left. \right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right. \left. \right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right. \left. \right)} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_s+s-l}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right. \left. \right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\right. \left. \right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{is} - j_{sa}^{ik} - 1$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_{is}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - 1)!}{(\mathbf{l}_s - \mathbf{l} + 1 - l + 1)! \cdot (l - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(j_s + j_{sa} - l_{ik} - l_{sa})! \cdot (l_{ik} - j_s - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + \mathbf{l}_s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(\mathbf{l}_s+j_{sa}-\mathbf{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s > j_{sa}^{ik}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)} \\ j_{ik}^{a+j_{sa}^{ik}-j_i} \sum_{(j^{sa}=l_{sa}+n-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_s+s-l} \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{sa} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa})!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - \mathbf{l}_s)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(j^{sa} + \mathbf{l}_i - n - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{l=k}^{l_{ik}-l+1} \sum_{(j_s=l_s+n-D)}^{l_{sa}-l+1} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{j_{ik}=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - \mathbf{l}_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D-1)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{\substack{i_{ik}=j^{sa}+j_{sa}^{ik}-j_{ik}-j^{sa}-s \\ i_{ik}=j_i+j_{sa}-s}} \sum_{\substack{\kappa=j_{sa}^{ik}+1 \\ \kappa=j_i+j_{sa}-s}} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{\substack{i_{ik}=n+\mathbb{k} \\ i_{ik}=n+\mathbb{k}-j_s+1}} \sum_{\substack{(n_i-\mathbb{k}-1) \\ (n_i-\mathbb{k}-1)}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_s+s-l}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}+1)} \sum_{n_i=n+\mathbb{k}}^{(l_i+n+j_{sa}-j_{ik}-1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{l_i-l+1} \\ \sum_{n_s=n-j_{sa}+1}^{j_{sa}+j_{sa}^i-i} \sum_{n_{sa}=n-j_{sa}+1}^{(l_i+n+j_{sa}-j_{ik}-1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{n_{is}=n-\mathbb{k}-j_s+1}^{n} \sum_{n_{ik}=n-\mathbb{k}-j_s+1}^{(n_i-j_{sa})} \sum_{n_{sa}=n-j_{sa}+1}^{(n_i-j_{ik}-j_{sa}-\mathbb{k}_2)} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

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$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_s = l + n - D) \leq k \leq (j_k - j_{sa}^{ik} + 1)} \sum_{\substack{j_{ik} = l_{ik} + n - D \\ j_{ik} \leq j_i + n + j_{sa} - D}} \sum_{\substack{(l_s + j_{sa} - l) \leq i \leq (j_i + j_{sa} - j_{sa}) \\ i \geq j^{sa} + s - j_{sa}}} \sum_{\substack{n_i = n + j_{sa} - j_{sa} + 1 \\ n_i \leq n + j_{ik} - \mathbf{k}_1}} \sum_{\substack{n_{ik} = n + \mathbf{k}_2 - j_{ik} + 1 \\ n_{ik} \leq n + j_{ik} - j^{sa} - \mathbf{k}_2}} \sum_{\substack{n_{sa} = n - j^{sa} + 1 \\ n_{sa} \leq n - j_{sa} + 1}} \sum_{\substack{n_s = n - j_i + 1 \\ n_s \leq n - j_{ik} + 1}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{j_{ik}=l_{ik}+n-(\mathbf{l}_{sa}+\mathbf{l}_{ik}-\mathbf{l}_i)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_s-l+1)}$$

$$\sum_{n_i=n-(\mathbf{l}_{sa}+\mathbf{l}_{ik}-\mathbf{l}_i)}^{n} \sum_{n_{is}=n+(\mathbf{l}_{sa}+\mathbf{l}_{ik}-\mathbf{l}_i)+1}^{n_i-j_s} \sum_{n_{ik}=n+\mathbf{l}_{ik}-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{a=n-j^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{\substack{() \\ (j_s=j_{ik}-j_{sa}^{ik}+1)}}^{\infty} \sum_{\substack{(l_s+j_{sa}-l) \\ (j^{sa}=l_i+\mathbf{n}+j_{sa}-D-j_{ik}-j_{sa})}}^{\infty} \sum_{\substack{(n_i-j_s+1) \\ (n_i=k-(l_i+j_{sa}-s)+1)}}^{\infty} \sum_{\substack{(n_{ik}=n_j+j_s-j_{ik}-\mathbb{k}_1) \\ (n_{sa}=n_j+j_{sa}-j_{ik}-j^{sa})}}^{\infty} \sum_{\substack{(n_s=n_{sa}+j^{sa}-j_i) \\ (n_s=n_{sa}+j^{sa}-j_i)}}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_i - n_s - j^{sa} + s - l_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_i - n_s - j^{sa} - j_{ik} - j_{sa} - l_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} > \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\ & \sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1, n_{sa}=n+\mathbb{k}-j_{sa}+1)}^{(n_i-j_s+1)} \sum_{j_{ik}=l_{ik}+n-D}^{n_{is}+j_{ik}-\mathbb{k}_1} \\ & \sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_i-j_{ik}+1} \\ & \frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_s - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\ & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \end{aligned}$$

$$\sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-1}^{l_i-l+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{ik}+j_{ik}-j_{ik}^{ik}-1)!}^{(n_{sa}=n-j_{sa}+1)} \sum_{n_{sa}=n-j_i}^{n_{sa}-j_i} \\
& \frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_i-j_s+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-n_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
& \frac{(n_{sa}-n_s-1)!}{(-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
& \frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
& \frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=l}^{l_{ik}-l+1} \sum_{j_s=l_s+n-D}^{l_s-l+1} \\
& \sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{ik}-l+1} \left(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} \right) \sum_{j_i=j^{sa}+s-j_i}^{l_{sa}-l+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k} \\
& \sum_{(n_{sa}=n-sa+1)}^{(n_{ik}+j_{ik}-k)} \sum_{n_s=n-j_i}^{n_{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(n_s - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
\end{aligned}$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\begin{aligned} & \sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+s-1}^{\infty} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}^{\infty} \\ & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-s)}^{\infty} \sum_{n_s=n_{sa}+j_{sa}^{sa}}^{\infty} \\ & \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - s - l_i - l_s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j_{sa}^{sa} - l_i - l_s - \mathbf{n} - \mathbb{k} - \mathbb{k}_1 - j_{sa}^{sa})!} \cdot \\ & \frac{1}{(j_{sa}^{sa} + j_{sa}^{ik} - j_s - s)!} \cdot \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \end{aligned}$$

$$\begin{aligned} & D \geq \mathbf{n} < n \wedge l_s > \mathbf{n} - \mathbf{n} + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa}^{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & D \geq \mathbf{n} < n, \mathbb{k} = \mathbb{k} > 0 \wedge \\ & j_s - j_{sa}^{sa} > 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge \\ & s: \{j_{sa}^s, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge \\ & s \leq \mathbf{s} \wedge \mathbf{s} = s + \mathbb{k} \wedge \\ & \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow \end{aligned}$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+\mathbf{n}-D-s)} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_l=l_i+n-D}^{l_i-l+1} \\
 & \sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{lk}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_{i+1}}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2) \cdot (n_i - n_{is} - 1)!} \cdot \\
 & \frac{(n_{is} - n_{lk} - 1)!}{(j_{ik} - j_{is} - 1) \cdot (n_{is} + j_{is} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{lk} - n_{sa} - 1)!}{(j^{sa} - j_{lk} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n_{sa} - 1)!}{(j_i - j^{sa} - 1) \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_s - l + 1)}
 \end{aligned}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}+1)!}.$$

$$\frac{(n_{is}-n_{im}-1)!}{(j_{ik}-j_{sa}+1) \cdot (n_{is}+j_{sa}-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{im}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\dots+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - (j_{sa}^s)!)}$$

$$\frac{1}{(\mathbf{n} - l_s - j_s - s)!}$$

$$\frac{(l_s - l + 1)! \cdot (j_s - 2)!}{(l_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + s \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq \mathbf{n} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} - j_i + j_{sa} - s \wedge j_{sa} - s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > \mathbf{n} \wedge l_{sa} + j_{sa}^{ik} - j_s > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = \mathbb{k} + \mathbb{k} \wedge$$

$$\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_{sa}-l+1)} \sum_{j_l=l_i+\mathbf{n}-D}^{l_i-l+1}$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j=n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{is}+1) \cdot (n_{is}+j_{is}-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{is}-1)! \cdot (n_{is}+j_{is}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{(l_s-l+1)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - (j_{sa}^s)!)}$$

$$\frac{1}{(\mathbf{n} - l_s^s - j_s - s)!}$$

$$\frac{(l_s^s - l + 1)! \cdot (j_s - 2)!}{(l_s^s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + s$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s - j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + s = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = s \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I > \mathbb{k} >= 0$$

$$j_{sa} \leq j_i - 1 \wedge j_{sa}^{ik} = j_i - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, \mathbb{k}_2, \mathbb{k}_3, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq \mathbb{k} \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge z = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}+s-l-j_{sa}+1)} \sum_{j_i=l_i+n-D}^{()}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_{is} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D + j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} - \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{l_{sa}-\mathbf{l}+1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)} \sum_{j_i=l_{sa}+s-\mathbf{l}-j_{sa}+2}^{l_i-\mathbf{l}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(n - l - 1)!}{(n - l_s - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i + j_i - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - J_i)!}{(D + n - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_i+n-D}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, l_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$j_{ik}=j^{sa}+l_{ik}-s \quad (j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}) \quad j_i=l_i+n-D$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\infty} \sum_{\substack{j_s = j_{ik} + l_{sa} \\ (l_{ik} + j_{ik} - l_{sa} - j_{sa} + n + j_{sa} - k) < j_s \leq j_{ik} + l_{sa} + 1}} \binom{j_i = l_{ik} + j_{sa} + 2}{l_i - l + 1}$$

$$\sum_{n_i = \mathbf{n} + \mathbf{k}}^n \sum_{\substack{(n_i - j_s + 1) \\ (n_i + j_{ik} - j^{sa} - \mathbf{k}_2) < n_{ik} = \mathbf{n} + \mathbf{k}_2 - j_{ik} + 1 \\ (n_{sa} = \mathbf{n} - j^{sa} + 1)}}^{\min(n_i - j_s + 1, n_{sa} + j^{sa} - j_i)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{is} + j_s - j_{ik} - \mathbf{k}_1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{(j_i+n-D)}^{l_{ik}+s-l-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-1)}^{(n_i-s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-\mathbb{k}_1}^{n_i-s+1}$$

$$\sum_{(n_{sa}=n_{is}+l_{ik}-j_{sa}-s)}^{\infty} \sum_{(n_{is}=n_{sa}+j^{sa}-j_i)}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_{si} - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_{si} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \leq \mathbf{n} < n \wedge d_s > D - n - 1 \wedge$$

$$2 \leq i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = j_{sa} - j_{sa}^{ik} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \leq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$i \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=l_s+n+j_{sa}-D-1)}^{(j_i+l_i+n-D)} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$(n_{ik}+j_{ik}-\mathbb{k}_2) n_{sa} - j^{sa} - j_i \\ (n_{sa}=j^{sa}+1) \quad n_s=n-j_s-1$$

$$\frac{(n_i - n_s - 1)!}{(j_s + 2)! \cdot (n_i + j_s - n_{ik} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_s+n+j_{sa}-D-1)}^{(l_s+j_{sa}-l)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_i - 1)!}{(j_{sa} - j_i - 1)! \cdot (n_{sa} + j_{sa} - n_i - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D + j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} - \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{D}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right. \left.\right)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\mathbf{l}_i} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right. \left.\right)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_s+s-\mathbf{l}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\mathbf{l}_s+s-\mathbf{l}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right. \left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\mathbf{l}_s+s-\mathbf{l}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i + j_{sa} - s \wedge \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_i+\mathbf{n}+j_{sa}-D-s-1)} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_i-\mathbf{l}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - l - 1)!}{(\mathbf{l}_s - \mathbf{l}_i - l + 1) \cdot (\mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_s - s)!}{(j^{sa} + \mathbf{l}_i - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - l_i)!}{(\mathbf{D} + j_l - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-\mathbf{l}_{ik})}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}-\mathbf{l}_s-\mathbf{l}_{sa}}^{\infty} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(s_a-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)=(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=\mathbb{k}}^{l_{sa}-l+1} (j_s = j_{ik} + l_{sa} - k)$$

$$\sum_{j_{ik}=j^{sa}+l_{sa}-s-a}^{l_{sa}-l+1} (j^{sa} = \mathbf{l}_{sa} - j_{sa} - D - s) n_{ik} = n_s - j_{sa}$$

$$\sum_{i=n+\mathbb{k}}^n (n_i - j_s + 1) \sum_{n_{ik}=n_s + j_s - j_{ik} - \mathbb{k}_1}^{n_i - j_s + 1} n_s = n_{sa} + j^{sa} - j_i$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} n_s = n_{sa} + j^{sa} - j_i$$

$$\frac{(3 \cdot n_{is} + 3 \cdot j_s - j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - j_s - n_{sa} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa} - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=l} \sum_{(j_s, j_{ik}, j^{sa}, l_s, l_{ik})} \binom{}{} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_{ik}+n_{ik}-D-j_{sa})} \binom{l_i+n+j_{sa}-D-s-1}{j_i=n-i+D} \\
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}} \sum_{(n_{is}=\mathbb{k}-j_s+1) \wedge n_{ik} \leq n_{is} \leq j_{ik}+1} \binom{n_i-j_s+1}{n_{is}-\mathbb{k}-j_s+1} \binom{n_{is}+j_s-j_{ik}-\mathbb{k}_1}{j_{ik}+1} \\
 & \sum_{n_{ik}=\mathbf{n}-j^{sa}+1} \sum_{n_s=\mathbf{n}-j_i+1} \binom{(n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{2! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\left(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}}^{n_{is}+j_s-j_{ik}-\mathbb{k}} \\
& \sum_{(n_{sa}=\mathbf{n}+s-j_{sa}+1)}^{\left(n_{ik}+j_{ik}-\mathbb{k}_2\right)} \sum_{n_s=\mathbf{n}-j_i}^{n_{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\left(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1\right)} \sum_{j_i=j^{sa}+s-j_{sa}}
\end{aligned}$$

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$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right. \left.\right)} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot$$

$$\frac{(D - s)!}{(D - j_i - \mathbf{n})! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + s - 1 \leq j_i \leq \dots \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa}^{ik} = l_{ik} \wedge j_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} \wedge$$

$$s \cdot (j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^s) \wedge$$

$$s \geq \dots \wedge s = s + \mathbb{k} \wedge$$

$$\exists z: z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{n} \sum_{(j^{sa}=l_s+n+j_{sa}-D-1)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa} + 1) \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{n} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_l-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_{sa} - s)!} \cdot$$

$$\frac{(\mathbf{l}_i - l_i)!}{(\mathbf{l}_i - n - \mathbf{k} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{l_{ik}=l} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \left(\dots \right)$$

$$\sum_{j_{sa}=j^{sa}+l_{ik}} \sum_{(j^{sa}-l_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n=k}^{\mathbf{n}} \sum_{(n_{is}=n+k-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbf{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i} \left(\dots \right)$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbf{k} - \mathbf{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbf{k} - \mathbf{k}_1 - j_{sa})!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
& f_z S_{j_s, j_{ik}, j^{sa}, j_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \sum_{(j_i=l_i+n-D)} \\
& \sum_{(n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-j_{sa})} \sum_{(j_{sa}=(j^{sa}-1)+l_{sa}-l_{ik})} \sum_{(j_i=l_i+n-D)} \\
& \sum_{(n=n+\mathbb{k})} \sum_{(n_{is}=n-\mathbb{k}-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \sum_{(n_{sa}=n-j^{sa}+1)} \\
& \sum_{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}+j^{sa}-j_i)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

gündünya

A

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=\mathbf{l}} \sum_{\substack{() \\ (j_s=j_{ik}+l_s-l_{ik})}} \begin{aligned} & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{\substack{() \\ (j^{sa}=j_{ik}+l_{sa})}}^{\substack{-l+1 \\ (-j^{sa}-l)-j_{sa}}} \\ & \sum_{n_i=n+\mathbb{k}_1-i}^n \sum_{\substack{(n_i-j_s) \\ (n_i-j_{ik}-j^{sa})}}^{\substack{n_i+j_s-j_{ik} \\ (-j_{ik}-j^{sa})-j_i}} \sum_{\substack{(n_{is}+j_s-j_{ik}) \\ (n_{is}=n-j_i+1)}}^{\substack{n_{is}+j_s-j_{ik} \\ (n_s=n-j_i+1)}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - n_{is} - 1)! \cdot (n_i - n_{is} - j_s + 1)!}. \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}. \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}. \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}. \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}. \\ & \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}. \\ & \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}. \\ & \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \end{aligned}$$

gündün

$$\begin{aligned}
& \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j_s=j_{ik}+l_{sa}-l_{ik})}^{\infty} \sum_{j_i=j_{sa}^{sa}+s-i}^{\infty} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+s-i-j_{ik}-\mathbb{k}_1}^{\infty} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j_{sa}^s}^{\infty} \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - l - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n - j_{sa}^{sa} - l_i - n - l - \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot \\
& \frac{1}{(j_{sa}^s - j_s - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$\begin{aligned}
& D \geq n < n \wedge l_s > D - n + 1 \wedge \\
& 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
& j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{ik}^a \leq j_i + j_{sa}^{sa} - 1 \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
& l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge
\end{aligned}$$

$$D \geq n < n \wedge l = \mathbb{k} >= n \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, i, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s - j_{sa}^s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_i+\mathbf{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_s)}^{\left(\right)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-\mathbf{n}-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{is}-1) \cdot (n_{is}+j_{is}-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=j_{ik}+l_s-l_s)}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_s)}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n-j^{sa}+1)}}^{\sum_{(n_{sa})}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_l)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa} - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^{\infty}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - l_i - 1)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa}) \cdot (j_i + j_{sa} - \mathbf{l}_i - s)!}.$$

$$\frac{(\mathbf{l}_i - l_i)!}{(i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{i=l}^{\mathbf{n}} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{(n_i-j_s+1)} \dots$$

$$\sum_{j_{ik}=1+n+j_{sa}}^{n+j_{sa}-l} \sum_{i=j_{ik}+l_{sa}-l_{ik}}^{(n_i-j_s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=l}^{\mathbf{l}_s} \sum_{(j_s=j_{ik}-l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=\mathbf{l}_i+n+j_{sa}^{ik}-D}^{l_s+j_{sa}^{ik}-\mathbf{l}} \sum_{(j^{sa}=j_{ik}+l_{sa})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\)}$$

$$\sum_{n_i=n+\mathbb{k}-j_s}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik})}^{(\)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}$$

$$\frac{(\mathbf{l}_s - n_{is} + 2 \cdot j_s - \mathbf{l} - 1 - n_s - j_s - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} - 2 \cdot j_s - n_{sa} - j_{sa} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n \wedge \mathbf{l}_s > \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i \wedge j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}^{(l_i + n - D - s)} \sum_{j_{ik} = j_s + l_{ik} - l_s}^{\binom{n}{l_i - l + 1}} \sum_{n_i = n + l_{ik} - l_s + \mathbb{k} - j_s + 1}^{(n_i - n_{sa} - 1)} \sum_{n_{is} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - n - \mathbb{k}_1} \frac{(n_i - n_{is} - 1)!}{(j_s - l_s + 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(-j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(\mathbf{l}_{sa} - \mathbf{l} - j_{sa} + 2)} \sum_{(j_s = l_i + \mathbf{n} - D - s + 1)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}} \\
& \frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
& \frac{(n_{is}-n_{is}-1)!}{(j_{ik}-j_{ik}-1) \cdot (n_{is}+j_{ik}-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{is}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_i+n-D-s+1)} \\
& \sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\begin{aligned} & \frac{1}{(\mathbf{n} + j_{sa}^s - j_s - l)^!} \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\ & \frac{(D - 1)^!}{(D + j_{ik}) \cdot (\mathbf{n} - l_i)^! \cdot (n - j_i)^!} \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > j_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{n} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(n_i-j_s+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(n - l - 1)!}{(n - l_s - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i + j_i - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + n - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{l_i-l+1}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{()} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{l_i-l+1} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_i-j_s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s -$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(-l_i)!}{(D + j_i - n - l_i)!(n - j_i)!} =$$

$$\sum_{j=s+1}^{(l_{ik}-l-j_{sa}^{ik}+2)}$$

$$\sum_{i_{ik}=j_s+l_{ik}-l_s} \sum_{(j_i=j_{ik}+l_{sa}-l_k)} j_i=j^{sa+s-j_{sa}}$$

$$\sum_{\substack{i=n+\mathbb{K} \\ i=n+\mathbb{K}-j_s+1}}^{(n_i-j_s+1)} n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{K}_1$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{1}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(-n_{is} + 2 \cdot -n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbf{k} - \mathbf{k}_1)!}{(3 \cdot n_{is} - 2 \cdot -n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbf{k} - \mathbf{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
& f_z S_{j_s, j_{ik}, j_{sa}, j_i} \\
& \sum_{k=l}^{(l_i - l - D - s)} \sum_{(j_s - j_{ik} - j_{sa})}^{(l_i - l + 1)} \sum_{l_i + n - D}^{(l_i - l + 1)} \\
& \sum_{n_i = j_s + l_{ik} - j_{sa}}^{(n_i - j_{ik} - 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{(n_i - j_{ik} - \mathbb{k}_1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{is} + j_{sa} - j_i} \\
& \sum_{n_s = n - j_i + 1}^{(n_{sa} + j_{sa} - j_i)} \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{is} - j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{(n_{is} - j_{ik} - 1)!} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.
\end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{(j_{is}=l_{sa}+s-j_{sa})}^{()} \sum_{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+j_{ik}+1}^{(n_{is}+j_s+1)} \sum_{n_{ik}-\mathbb{k}_1}^{(n_{is}+j_s+1)}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}}^{(n_{sa}+j^{sa})}$$

$$\sum_{(n_{sa}-n_s-1+1)}^{(n_{sa}-n_s-1+1)} \sum_{=n-j_i+1}^{(n_{sa}-n_s-1+1)}$$

$$\frac{(n_{sa}-n_s-1)!}{(-2)! \cdot (-n_{is}-j_s+1)!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(-j_{ik}-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{lk}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n+\mathbb{k}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \dots - 2 \cdot \mathbb{k} - \mathbb{x}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \dots - 2 \cdot \mathbb{k} - \mathbb{x}_2 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} - j_{sa} - j_s - s)!}.$$

$$\frac{(l_s)}{(l_s - l - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i)}{(l_i - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq \dots \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq \dots - a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j_i - s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = \dots \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s > \mathbb{k} + \mathbb{k} \wedge$$

$$\mathbb{z} = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=l_i+n-D}^{(l_{sa}-l+1)} l_i-l+1$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{is}+1) \cdot (n_{is}+j_{is}-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{is}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{()}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-l_{ik})}^{\mathbf{()}}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - l)^!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l)^!}{(D + j_{ik}) \cdot (\mathbf{n} - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - 1 \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - l_{ik} \wedge l_i - j_{sa} - s > l_i \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^i = j_{sa}^{ik} - 1$$

$$s: \{j_s^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \bullet 4 \wedge s = s \wedge \mathbb{k} \wedge$$

$$\mathbb{k}_{z+1} = 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{l_i-l+1} \sum_{j_i=l_i+n-D}^{n_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n-j^{sa}+1)}}^{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_l)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_i+n-D}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i - 1)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_s+n+j_{sa}-D-1)}^{(l_s+j_{sa}-l)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_i - s)!}.$$

$$\frac{(\mathbf{l}_i - \mathbf{l}_i)!}{(\mathbf{l}_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{j_s=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-\mathbf{l}_{ik})}^{l_s+s-\mathbf{l}}$$

$$\sum_{j_{ik}=n+\mathbb{k}-\mathbf{l}_{ik}-l_{ik}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(n_i-j_s+1)} \sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{l_s+s-\mathbf{l}}$$

$$\sum_{n+\mathbb{k}=(n_{is}=n+\mathbb{k}-j_s+1)}^n \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{l_s+s-\mathbf{l}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{l_s+s-\mathbf{l}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f(z) &= \sum_{l=1}^{\infty} \sum_{i=1}^{l_s - l_{ik}} \sum_{j=i+1}^{l_i - l_{ik} + 1} \sum_{n_i=n+\mathbb{k}}^{l_{sa} + j_{sa}^{ik} - l_{ik} + 1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{j_{ik} - j_{sa}^{ik} - D + j_{sa}} \\ &\quad \sum_{n_{sa}=n-j^{sa}+1}^{n_i - n_{is} + 1} \sum_{n_s=n-j_i+1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \end{aligned}$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_i)}^{\infty}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa})}^{\infty} \dots -j_{sa}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{sa}+j_{sa}-j_{ik}-\mathbb{k}_1}^{n_{ik}-j_{sa}}$$

$$(n_{sa}-j_{sa}+j_{ik}-j^{sa}-s) n_s = n_{sa} + j^{sa} - j_i$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_i - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{ca} - n_i - n_s - j^{sa} - j_i - j_{sa} - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - n + 1 \wedge$$

$$D + \mathbf{l}_s + s - n - l_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^s \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{\left(\right.)} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{l_i-l+1} \sum_{(n_{is}=\mathbb{n}+\mathbb{k}-1)}^{n_{ik}=n+\mathbb{k}_2-j_{ik}+1} \\ \sum_{n_i=\mathbb{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbb{n}+\mathbb{k}-1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{n_{is}+j_s-n_{ik}-\mathbb{k}_1} \\ \sum_{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_{sa}+j^{sa}-j_l)}^{n_{sa}+j^{sa}-j_l} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_s - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{lk}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n+\mathbb{k}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - 2 \cdot \mathbb{k} - j_{sa})!}.$$

$$\frac{1}{(n - j_{sa} - j_s - s)!}.$$

$$\frac{(l_s)}{(l_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i)}{(l_i - j_i - n - l_i)! \cdot (n - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{j}_s < D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n - a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j_{sa} - s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{j}_s < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s > \mathbb{k} + \mathbb{k} \wedge$$

$$\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=l_i+n-D}^{(\)} l_i-l+1$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=j-n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{is}+1) \cdot (n_{is}+j_{is}-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{is}-1)! \cdot (n_{is}+j_{is}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{(\mathbf{l}_{ik}-\mathbf{l}-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\)}$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\begin{array}{c} \\ \end{array}\right)} \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - l)^!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l + 1)^!}{(D + j_{ik}) \cdot (\mathbf{n} - l_i)^! \cdot (n - j_i)^!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - l_{ik} \wedge l_i - j_{sa} - s > l_i \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^i = j_{sa}^{ik} - 1$$

$$s: \{j_s^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \neq 4 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_{z+1} = 2 \wedge \mathbb{k} = \mathbb{k}_1 - \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s}^n \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i = l_i + n - D}^{l_i - l + 1}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa} - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right.} \sum_{j_i=j^{sa}+s-j_{sa}}^{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\varsigma_{i_c, i_s, i_k, l_s, l_i, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - n_s - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i - \mathbf{l} - 1)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{\substack{i=s-l+1 \\ i=l_{ik}+n-D}}^{\substack{l_{ik}-l+1 \\ l_{ik}+n-D}} \sum_{\substack{j=i \\ j=j^{sa}+l_{sa}-l_i}}^{\substack{(n_{sa}-j_s+1) \\ (j^{sa}+l_{sa}-l_i)}} \sum_{\substack{j_i=l_{ik}+s-l-j_{sa}^{ik}+2 \\ j_i=l_{ik}+s-l-j_{ik}}}^{\substack{l_i-l+1 \\ l_i-l+1}} \\$$

$$\sum_{\substack{n_i=n+\mathbb{k} \\ (n_{is}=n+\mathbb{k}-j_s+1)}}^n \sum_{\substack{(n_{is}-j_s+1) \\ n_{ik}=n+\mathbb{k}_2-j_{ik}+1}}^{(n_{is}-j_s+1)} \sum_{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ n_{is}+j_s-j_{ik}-\mathbb{k}_1}}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n-j^{sa}+1)}}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=\mathbf{n}-j_i+1}}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\left(\right)} \sum_{l_{ik}+j_{sa}-l_{sa}+1}^{()} \sum_{l_{i+1}-D}^{l_{i+1}-l_{ik}} \\ \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=i+l_{sa}-\mathbf{l}_s) }^{\left(\right)} \sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \\ \sum_{n_{ik}=n_{sa}+j_{sa}^{ik}-j_{ik}} \sum_{(n_{sa}=n_{sa}+j_{sa}^{ik}-j_{ik})}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()} \\ \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} + s - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} - s \wedge \mathbf{l}_s > D - s + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)} \\
&\sum_{j_{ik}=l_s+\mathbf{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_i+\mathbf{n}-1}^{l_s+s-\mathbf{l}} \\
&\sum_{n_l=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j^{sa}-\mathbb{k}_2)}^{n_{is}+\mathbf{n}-j_{ik}-\mathbb{k}_1} \\
&\sum_{n_{sa}=\mathbf{n}-j_i+1}^{n_{is}+j_s-n_i} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j_{sa}-n_i} \\
&\frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\frac{(n_i - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - n_s - 1)!}{(n_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
&\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}
\end{aligned}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=n-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{sa}-1) \cdot (n_{is}+j_{sa}-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_{i_s}-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=l}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_i-l_{sa})}^{\left(\right)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left.\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\begin{aligned} & \frac{1}{(n + j_{sa}^s - j_s - l)^!} \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\ & \frac{(D - 1)!}{(D + j_{ik}) \cdot (n - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = j_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left.\right)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_t+\mathbf{n}+j_{sa}-D-s)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_{i+1}}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(n - l - 1)!}{(n - l_s - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + n - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-1} \sum_{(j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_i+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - n_s - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i - \mathbf{l} - 1)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{\substack{j_{ik}=j_s+j_{sa}^{ik}-j_{sa}}}^{\left(l_{ik}+j_{sa}-j_{sa}^{ik}+1\right)} \sum_{\substack{(j^{sa}=l_{sa}+j_{sa}-D-s)}}^{\left(j^{sa}+l_i-l_{sa}\right)} \sum_{\substack{j_i=j^{sa}+l_i-l_{sa}}}^{\left(j_i+l_s-l_{ik}\right)}$$

$$\sum_{\substack{n=\mathbb{k} \\ (n_i=s+1)}}^{\left(n_i-\mathbb{k}-1\right)} \sum_{\substack{(n_{is}=n+\mathbb{k}-j_s+1) \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}}^{\left(n_{is}-\mathbb{k}_1\right)} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot n_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot n_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, i_i} = \sum_{k=l}^{(j_s=j_{ik})-1} (l_s - l_{ik})$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(l_s+j_{sa}-l)}^{(l_s+j_{sa}-l)} \sum_{n+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_{sa}-1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

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$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\)}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_{ts}=s^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-1+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}-1+1}^{n_{is}+j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j^{sa}-s} \\
& \frac{(n_{sa}-n_{is}-1)!}{(s-2)! \cdot (s-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-1)!}{(s-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)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \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)!} - \\
& \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\)}
\end{aligned}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_s+j_{sa}-l)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\dots+j^{sa}-j_i}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} - l_s - j_s - s)!}$$

$$\frac{(l_s - l + 1)! \cdot (j_s - 2)!}{(l_s - l - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_s - l - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + s \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s - j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa} + s = l_s \wedge j_s + j_{sa}^{ik} - j_{sa} > s \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I - \mathbb{k} >= 0$$

$$j_{sa} \leq j_i - 1 \wedge j_{sa}^{ik} = j_i - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, \mathbb{k}_2, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq \mathbb{s} = s + \mathbb{m} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}+l_s-l_s)}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - j_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_{is} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\left(\right.} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_s)}^{\left.\right)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(\mathbf{n} - \mathbf{l} - 1)!}{(j_i - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_{ik}-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+l_i-l_{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}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, l_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)} \\ j_{ik}=l_s+n+j_{sa}-D-1 \quad (j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s) \quad j_i=j^{sa}+l_i-l_{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_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \quad n_{sa}+j^{sa}-j_i \\ (n_{sa}=\mathbf{n}-j^{sa}+1) \quad n_s=\mathbf{n}-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} - 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)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{j_s = l \\ (j_s = j_{ik} + l_s - s)}}^{l_s + j_{sa}^{ik} - l} \sum_{\substack{j_i = j_{ik} + l_s - s \\ (j_i = j_{ik} + l_i - l_{sa})}}^{-l - s + 1} \dots$$

$$\sum_{\substack{i_s = n + \mathbb{k} \\ (n_{is} = n - \mathbb{k} - j_s + 1)}}^n \sum_{\substack{j_{ik} = n + \mathbb{k}_2 - j_{ik} + 1 \\ (j_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{sa} = n - j^{sa} + 1)}}^{n_i - j_s + 1} \sum_{\substack{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1 \\ (n_{ik} + j_{ik} - n_{sa} - j^{sa} - j_i) \\ (n_s = n - j_i + 1)}}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \dots$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{\substack{j_{ik}=l_i+n+j_{sa}^{ik}-D-s \\ j_{ik}=l_i+n+j_{sa}^{ik}-D-s}}^{l_s+j_{sa}^{ik}-l} \sum_{\substack{(n_i-j_s+1) \\ (n_i=j_{ik}+j_{sa}-j_{sa}^{ik}) \\ n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}}}^{()} \sum_{\substack{j_i=j_{sa}+l_i-l_{sa} \\ j_i=j_{sa}+l_i-l_{sa}}}^{j_{sa}+l_i-l_{sa}}$$

$$\sum_{\substack{n_i=n+\mathbb{k} \\ (n_{is}=n+\mathbb{k}-1)}}^n \sum_{\substack{(n_i-j_s+1) \\ (n_i=j_{ik}+j_{sa}-j_{sa}^{ik}) \\ n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}}}^{()} \sum_{\substack{(n_{sa}=n_{is}+j_{ik}-j_{sa}^{ik}-s-1) \\ (n_{sa}=n_{is}+j_{ik}-j_{sa}^{ik}-s-1) \\ (n_{sa}=n_{is}+j_{ik}-j_{sa}^{ik}-s-1) \\ (n_{sa}=n_{is}+j_{ik}-j_{sa}^{ik}-s-1)}}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_{is} - j_{sa}^{sa} - j_{sa}^{ik} - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_{is} - j_{sa}^{sa} - j_{sa}^{ik} - j_i - \mathbf{n} - 1 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s = D - \mathbf{n} - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^s - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^s - j_{sa} \leq j_{sa}^{sa} \leq j_{sa}^s + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$< j^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\begin{aligned} & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_s} \\ & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k} \\ & \sum_{(n_{sa}=n+k-j_s+1)}^{(n_{ik}+j_{ik}-k)} n_{sa}! / (j^{sa}-j_i)! \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_s - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - j_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_i - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{(\mathbf{l}_{ik}-\mathbf{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa})}^{(\)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i + j_{sa} - s \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}}^{(\mathbf{l}_i + \mathbf{n} - D - s)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s}^{(l_i + j_{sa} - l - s + 1)} \sum_{(j^{sa} = l_i + \mathbf{n} + j_{sa} - D - s)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - l - l + 1) \cdot (l_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_i + \mathbf{n} - D - s + 1)}$$

$$\sum_{j_{ik} = l_{ik} - l_s}^{(l_i + j_{sa} - l - s + 1)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{j_{ik} = j_s + j_{sa} - l_s \\ (j^{sa} = j_{sa} + j_{sa}^{ik})}} \sum_{\substack{(l_s - j_s) \\ (j_s = l_t + n - D - s)}} \dots$$

$$\sum_{\substack{n = \mathbb{k} \\ (n_{is} = n + j_s + 1)}}^n \sum_{\substack{(j_i - j_s + 1) \\ (n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1)}} \sum_{\substack{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_s = n_{sa} + j^{sa} - j_i)}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_i - n_s - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(n_{is} + 3 \cdot j_s - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=l}^{\infty} \sum_{(j_s, j_{ik}, l_s, l_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_s=j_i+l_{sa})}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i=l_{sa}+n+s-D}^{l_{ik}+s-l_{sa}-k+1} \\
 & \sum_{n+\mathbb{k}(n_{is}-\mathbb{k}-j_s+1), \dots, n_{is}+j_{sa}-j_i}^n \sum_{a=n-j^{sa}+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \frac{(n_i - n_{is} - 1)!}{2! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

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$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\)} \sum_{j_i=l_{ik}+s-l-j_{sa}^{ik}}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+j_{ik}-k+1}^{n_{is}+j_s-j_{ik}-k}$$

$$\sum_{(n_{ik}+j_{ik}-k+1)}^{(n_{ik}+j_{ik}-k_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j_s-a}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{ik} + j_s - n_{ik} - j_i)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(n_s - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{l_{ik}+s-l-j_{sa}^{ik}+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{()}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} n_s=n_{sa}+j^{sa}-i_s$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot$$

$$\frac{(D - s)!}{(D - j_i - \mathbf{n} - s)! \cdot (n - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} - s \wedge j^{sa} + s - 1 \leq j_i \leq \dots \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge j_{sa}^{ik} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq \dots \wedge s = s + \mathbb{k} \wedge$$

$$\exists z: z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k} \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\infty} \sum_{j_i=l_s+s-l+1}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - l - l + 1) \cdot (\mathbf{l}_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - l_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa})! \cdot (j^{sa} + j_s - n_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_i-j_{sa}}^{\infty} \sum_{(j^{sa}=j_i+\mathbf{l}_{sa}-l_i)}^{\infty} \sum_{j_i=\mathbf{l}_{sa}+\mathbf{n}+s-D-j_{sa}}^{\mathbf{l}_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_s, j_{ik}, j_i} = \sum_{k=l}^{\infty} (j_s = j_{ik} + l_s - l_{ik})$$

$$\sum_{j_{ik} = n-D}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} - j_{sa} + n-D)}^{\infty} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\infty} \sum_{\substack{() \\ (j_s=j_{ik}-l_s-l_{ik})}}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}+l_{sa}-l-j_{sa}^{ik})}^{(l_{sa}-1)} \sum_{i=j^{sa}+l_i-l_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+j_{ik}-j_s+1}^n \sum_{n_{is}=n+\mathbb{k}_1-1}^{n_{is}-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{a=n-j^{sa}+1}^{n_k+j_{ik}-j^{sa}-\mathbb{k}_2) } \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\begin{aligned}
& \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{\infty} \sum_{j_i=j^{sa}+l_i-l_{ik}}^{\infty} \\
& \sum_{n_i=n+k}^{\infty} \sum_{(n_{is}=n+k-j_s+1)}^{\infty} n_{ik}=n_{is}+j_{ik}-k_1 \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{\infty} n_s=n_{sa}+j_{sa}^s \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_{ik} - s - k - k_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_{ik} - s - \mathbf{n} + l - j_{sa}^s)!} \cdot \\
& \frac{1}{(j_{sa}^s - j_s - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \\
& D \geq \mathbf{n} < n \wedge l_s > \mathbf{n} - n + 1 \wedge \\
& 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
& j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\
& l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
& D \geq \mathbf{n} < n \wedge k > \mathbf{k} \wedge \\
& j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge \\
& s: \{j_{sa}^s, \mathbf{k}_1, i, \mathbf{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge \\
& s \leq j_{sa}^s = s + \mathbf{k} \wedge \\
& \mathbb{K}_z: z = 2 \wedge \mathbb{k} = \mathbf{k}_1 + \mathbf{k}_2 \Rightarrow
\end{aligned}$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=n-j_i+1}^{n_{sa}+j^{sa}-l}}{(n_i-1)!}.$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{sa}-1) \cdot (n_{is}+j_{sa}-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right.)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}+j^{sa}-j_i)}} \sum_{n_s=\mathbf{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_l - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - l_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)} \\ \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{i+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_{sa}-\mathbf{l}+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\ \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_{is}-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}-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} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} - j_{ik} - l_{sa})!}.$$

$$\frac{(\mathbf{l}_i - l_i)!}{(\mathbf{l}_i - n - \mathbf{k}_1) \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{i=k}^n \sum_{j_s=j_{ik}+l_s-l_{ik}}^{(l_s-l_{ik})}$$

$$\sum_{j_{ik}=l_{sa}-n+j_{sa}^{ik}-D}^{n-k+1} \sum_{j_{ik}+j_{sa}-j_{sa}^{ik}=l_{sa}-n+j_{sa}^{ik}-D}^{-l+1} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbf{k}}^n \sum_{(n_{is}=n+\mathbf{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbf{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1} \\ \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\mathbf{l}_{ik}-\mathbf{l}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \\ \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_s}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_s)}^{j_i=j^{sa}+l_i-l_{sa}} \\ \sum_{n_i=n+\mathbb{k}-j_s}^{n} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j^{sa}-\mathbb{k}_2)}^{n_{sa}=n_{ik}+j_{sa}^{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_s=n_{sa}+j^{sa}-j_i} \\ \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - j_{sa}^{ik} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l)}^{\infty} \\
 &\quad \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=l_{sa})}^{(l_{sa}-l+1)} \\
 &\quad \sum_{n_i=n+j_{ik}-j_{sa}}^n \sum_{(n_i-j_{sa}+1)}^{(n_i-j_{sa})} \sum_{n_s=n+j_{ik}-j_{sa}}^{n_{is}+j_{sa}-j_{ik}-j_{sa}} \\
 &\quad \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{sa}-n_j+1)} \sum_{n_s=n-j_i+1}^{n_{is}-j_i} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - l_s)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-\mathbf{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-\mathbf{l}+1)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}} \\ & \sum_{(n_{ik}+j_{ik}>n_{sa}-j_i)}^{(n_{sa}=n_{is}-\mathbf{n}+1)} \sum_{n_{sa}=n_{is}-j_i}^{n_s=n-j_i} \\ & \frac{(n_i - n_{ls} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s - 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \end{aligned}$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-\mathbf{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}} \end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} n \\ n_{sa}+j^{sa}-i_s \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-i_s}^{(n_i-j_s+1)} \\ \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot (3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge \\ 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge \\ j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} \wedge j^{sa} + s - j_{sa}^{ik} \leq j_i \leq \\ l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge j^{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} \wedge \\ s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^s\} \wedge$$

$$s \geq \dots \wedge s = s + \mathbb{k} \wedge$$

$$\exists z: z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k} \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{n} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}+j^{sa}-j_i)}} \sum_{n_s=\mathbf{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_l)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)}}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)}} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}+j^{sa}-j_i)}} \sum_{n_s=\mathbf{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - l - \mathbf{l} + 1) \cdot (\mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - l_{ik} - l_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s = l_{sa} + \mathbf{n} - D - j_{sa} + 1)}^{(l_{ik} - l - j_{sa}^{ik} + 2)}$$

$$\sum_{j_{ik} = l_{sa} + l_{ik} - l_s}^n \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\)} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{(n_i - j_s + 1)}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\)} \sum_{n_s = n_{sa} + j^{sa} - j_i}^{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_s, j_{ik}, l_i} = \sum_{k=l}^{(j_s - l_s + n - D - j_{sa})} \sum_{(j_s = l_s + n - D)}^{(l_{sa} - l_i)}$$

$$\sum_{i=n+\mathbb{k}}^{n_s} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_{is}-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{(\mathbf{l}_s - \mathbf{l} - 1)} \sum_{i=j_{sa}+n-j_{sa}+1}^{(\mathbf{l}_s - \mathbf{l} + 1)} \sum_{l=j^{sa}+l_i-l_{sa}}^{(\mathbf{l}_{sa} - \mathbf{l} + 1)}$$

$$\sum_{n_i=n+j_{sa}-1}^n \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_{ik}-\mathbf{k}_1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{()} n_s=n_{sa}+j^{sa}-1$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s) \cdot (j_i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_s - n - j^{sa} - 1 - \mathbf{n} - \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s < D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s < n - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa} + 1 \wedge j_s - j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + s = l_s \wedge l_s > j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^i, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\frac{(n_{ik}+j_{ik}-\mathbb{k}_2) n_{sa}-j^{sa}-j_i}{(n_{sa}-j^{sa}+1) \quad n_s=n-j_s-1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - j_s + 1)! \cdot (n_i + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s + 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} + 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\)} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{l_{ik}+s-l-j_{sa}^{ik}+1} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{()}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} n_s=n_{sa}+j^{sa}-i_s$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_{sa}^s - s - s)!}{(l_s - l - 1)!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot \\ \frac{(D - \mathbf{n})!}{(D - j_i - \mathbf{n})! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} +$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa}^{ik} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \geq l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k}_1 = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z=2 \wedge \mathbb{k}_z = \mathbb{k}_2 \Rightarrow \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{l_s+j_{sa}^{ik}-l} \sum_{()}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{()}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - l_{sa} - 1)!}{(l_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right. \left.\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(\right. \left.\right)} \sum_{(j^{sa}=j_i+l_i-l_{sa})}^{\left(\right. \left.\right)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\left(\right. \left.\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right. \left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\right. \left.\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{is} - j_{sa}^{ik} - 1$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s = j_{ik} + \mathbf{l}_s - \mathbf{l}_{ik})}^{(\)}$$

$$\sum_{j_{ik} = l_{ik} + \mathbf{n} - D}^{l_{ik} - \mathbf{l} + 1} \sum_{(j^{sa} = l_i + \mathbf{n} + j_{sa} - D - s)}^{(l_{sa} - \mathbf{l} + 1)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_{sa} + j^{sa} - j_i}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - l - l + 1) \cdot (\mathbf{l}_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - l_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa})! \cdot (j^{sa} + j_s - n_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_i-j_{sa}}^{(n_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{(\)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f z^{\omega_j, j_{ik}, j^{sa}, j_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \sum_{(l_i+l_{sa}-l_{ik}-n_{ik}+n_{sa}-D-s)}$$

$$\sum_{j_s=j_{ik}+n-D-s}^{l+1} \sum_{(l_i+l_{sa}-l_{ik}-n_{ik}+n_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{\mathbf{k}=\mathbf{l}}^{\mathbf{l}} \sum_{(j_s=j_{ik}-l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-j^{sa}=j_{ik}+j_{sa}-n_i}^{l_{ik}-l+1} \quad j_i=j^{sa}+l_i-l_{sa}$$

$$n_i=n+\mathbb{k} \quad n_{ik}=n+\mathbb{k}-j_{ik} \quad n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1$$

$$n_{sa}=n_{ik}-j_{sa}-\mathbb{k}_2 \quad n_s=n_{sa}+j^{sa}-j_i$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_i - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - j_{ik} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge l_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, l_{ik}, j^{sa}, j_i} &= \sum_{k=l} \sum_{(j_s, l_{ik}, l_s - l_{ik})} \frac{\binom{}{}}{\binom{l_s + j_{sa}^{ik} - l}{j_{ik} = l_s + n + j_{sa}^{ik} - D - s}} j_i = j^{sa} + j_{sa} - j_i \\
 &\quad \sum_{n+1}^{l_s + j_{sa}^{ik} - l} \sum_{(n_i - j_s + 1)} \frac{(n_i - j_s + 1)!}{\binom{n_i + \mathbb{k}}{n_{is} + \mathbb{k} - j_s + 1} n_{is} - j_{ik} + 1} \\
 &\quad \sum_{n+1}^{n_i - j_s + 1} \sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1)} \frac{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1)!}{\binom{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1}{n_{sa} + j^{sa} - j_i} n_s = n - j_i + 1} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(n_{is} - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+l_i-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-k_1}^{n_{ik}=n_{is}+j_{ik}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j_{sa}}^{n_s=n_{sa}+j_{sa}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - k - k_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - n - k - k_1 - k_2 - j_{sa})!}.$$

$$\frac{1}{(j_{sa}^s - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa} - 1 \wedge j_s - j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + s \leq l_s \wedge l_s - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D > n > n \wedge I = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\{s, j_{sa}^i - 1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}$$

$$\begin{aligned} & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_s+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_i} \\ & \sum_{(n_{ik}+j_{ik}-j_{sa}+1)}^{(n_{sa}-n_{is}-1)} \sum_{n_{sa}=n_{is}-j_{sa}+1}^{n_{is}+j_{sa}-j_i} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{\left(\right)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s - s)!}{(l_s - l - 1)!}.$$

$$\frac{(l_s - l - 1)! \cdot (j_s - s)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}.$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \geq l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n & I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - l_{sa} - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_{is} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{is} - j_{sa}^{ik} - 1$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{(\)}$$

$$\sum_{j_{ik} = l_{ik} + \mathbf{n} - D}^{l_{ik} - \mathbf{l} + 1} \sum_{(j^{sa} = j_i + l_{sa} - l_i)}^{(\)} \sum_{j_i = l_{sa} + \mathbf{n} + s - D - j_{sa}}^{l_{sa} + s - \mathbf{l} - j_{sa} + 1}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_{sa} + j^{sa} - j_i}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - l - 1)!}{(\mathbf{l}_s - l - \mathbf{l} + 1) \cdot (\mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - l_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa})! \cdot (j^{sa} + j_s - n_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\)}$$

$$l_{ik} + s - l - j_{sa}^{ik} + 1$$

$$\sum_{j_{ik}=j^{sa}+j_i-j_{sa}}^{(\)} \sum_{(j^{sa}=j_i+\mathbf{l}_{sa}-l_i)}^{(\)} \sum_{j_i=\mathbf{l}_{sa}+\mathbf{n}+s-D-j_{sa}}^{(\)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

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$f(z^{n-k}, j_{ik}, j^{sa}, j_i)$ $\sum_{(j_s=j_{ik}+l_s-l_{ik})}$
 $\sum_{l_{sa}+s-l-j_{sa}+1}$
 $\sum_{j_i=l_{sa}+n+s-D-j_{sa}}$
 $\sum_{j_{ik}=l_s+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-1}$
 $\sum_{j_i+l_{sa}-l_i}$
 $\sum_{j_i=l_{sa}+n+s-D-j_{sa}}$
 $\sum_{n_i=n+\mathbb{k}}^{n}$
 $\sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$
 $\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$
 $\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$
 $\sum_{(n_{sa}=n-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i}$
 $\sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$
 $\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$
 $\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$
 $\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$
 $\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$
 $\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\infty} \sum_{\substack{() \\ (j_s=j_{ik}-l_s-l_{ik})}} \sum_{\substack{() \\ (j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{\substack{() \\ (j^{sa}=j_i+l_{sa}-l_i) \\ (n+s-D-j_{sa})}} \sum_{\substack{() \\ (n_i=n+\mathbb{k}-j_s) \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}} \sum_{\substack{() \\ (n_{sa}=n_{ik}+j_{sa}^{ik}-j^{sa}-\mathbb{k}_2) \\ (n_s=n_{sa}+j^{sa}-j_i)}} \sum_{\substack{() \\ (3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}} \frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s, j_{ik} + l_s - l_{ik})}^{()} \frac{\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} (j^{sa}-l+1) \sum_{j_i=j^{sa}+1-j_{ik}}^{(l_{sa}-l+1)}}{\sum_{n+k}^{n} \sum_{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_i-j_s+1)} \sum_{j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j^{sa}-l_{ik}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

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$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1\right)} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)} \sum_{j_i=j^{sa}+l_i-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{\left(n_i-j_s+1\right)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}-\mathbb{k}_1}^{\left(n_{is}+j_{ik}-j_{sa}-\mathbb{k}_1\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j_{sa}^s}^{\left(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_{ik} - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_{ik} - s - \mathbf{n} - l_{ik} - j_{sa}^s - j_{sa})!}.$$

$$\frac{1}{(j_{sa}^s - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa} - 1 \wedge j_s + j_{sa}^{ik} - j_{sa} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + s > l_s \wedge l_s - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D > \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\{s, j_{sa}^i - 1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+l_i-l} \\ & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k} \\ & \sum_{(n_{sa}=n-k-j_{sa}+1)}^{(n_{ik}+j_{ik}-k)} \sum_{n_s=n-j_i}^{n_{sa}-j^{sa}-j_i} \\ & \frac{(n_i - n_{is} + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \end{aligned}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s)!}{(l_s - l - 1)! \cdot (j_s - s)!} \cdot \\ \frac{(D - l)!}{(D - j_i - \mathbf{n} - 1)! \cdot (n - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa}^{ik} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \geq l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k}_1 = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - j_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D + j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \quad \sum_{k=\mathbf{l}}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{()} \\
& \quad \sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa})}^{()} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{()} \\
& \quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()} \\
& \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()}
\end{aligned}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{is} - j_{sa}^{ik} - 1$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{n} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_{sa}-l+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - l - l + 1) \cdot (\mathbf{l}_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - l_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{l_{ik}=l}^{\infty} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(l_s-l-1)}$$

$$\sum_{j_{ik}=l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\binom{n}{2}} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{n_i-j_s+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{\binom{n_i-j_s+1}{2}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_i-j_s+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{n}{2}} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_Z S_{j_s, J_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \left(\sum_{j_s=j_i+l_{sa}-l_i}^{l_s+s-l} \sum_{j_i=l_i+n-D}^{n} \right) \\ \sum_{i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_{is}-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{(\mathbf{l}_s - \mathbf{l} + 1)} \sum_{(j_s + k - l + 1) + n - D}^{(\mathbf{l}_s - \mathbf{l} + 1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + l_i - 1}^{n} \sum_{(j_{sa}^{ik} = j_i + l_{sa} - 1) + j_i = l_s + s - l + 1}^{n}$$

$$\sum_{n_i = n - l_i}^{n} \sum_{n_{is} = n + \mathbb{k}_1 - 1}^{n_i - j_s} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_i - j_{ik} - \mathbb{k}_1}$$

$$\sum_{a = n - j_{sa} + 1}^{n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2} \sum_{n_s = n - j_i + 1}^{n_{sa} + j_{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\infty} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-\mathbb{k}_1}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s) \cdot (j_i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_s - n - j^{sa} - \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + \mathbf{n} - l_i - \mathbf{n} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge \mathbb{N} = \mathbb{k} >= \mathbb{k}_1 \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, l_i, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}^{\infty}$$

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\infty} \\
& \sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s+1) \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}^{\infty} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\infty} \\
& \sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}+j^{sa}-j_i)}} \sum_{n_s=\mathbf{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_l)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l} - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l} - j_{ik} - \mathbf{l} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}} \sum_{(j^{sa}=\mathbf{l}_t+\mathbf{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}^{(\mathbf{l}_s+j_{sa}-\mathbf{l})}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i - 1)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=\mathbf{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}^{n_s+j_{sa}^{ik}-\mathbf{l}} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\)} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s) \cdot (j_{ik} - j_s - \mathbf{l}_s + 1)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l}_i)!}{(\mathbf{l}_s - n - \mathbf{k}) \cdot (n - j_i)!}.$$

$$\sum_{k=l}^{l+1} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{\substack{j_{ik} = l_{sa} - l - s + 1 \\ j_{ik} = l_{sa} + l_{is}}} \sum_{j_{ik} + l_{sa} - l_{ik}} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbf{k}}^n \sum_{(n_{is} = n + \mathbf{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbf{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbf{k}_1}$$

$$\sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbf{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\infty} \left[\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \right]$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D}^{l_s+j_{sa}^{ik}-\mathbf{l}} \sum_{j_{ik}=j_{ik}+l_{sa}-n_i}^{j_{sa}-j_{ik}+l_{sa}-n_i} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}-(\mathbb{k}-j_i+1)}^{n_i=n+\mathbb{k}} \sum_{n_{ik}=n+\mathbb{k}-j_s-\mathbb{k}_1}^{n_{ik}=n_{ik}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n_{ik}+j_{sa}-j_{ik}-\mathbb{k}_2}^{n_{sa}=n_{ik}+j_{sa}-j_{ik}-\mathbb{k}_2}$$

$$\sum_{n_s=n_{sa}+j_{sa}-j_i}^{n_s=n_{sa}+j_{sa}-j_i} \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j_{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j_{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > \mathbf{e} > n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-1)}^{(l_i+n-D-s)} \\
 &\quad \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-n+1)}^{()} \sum_{i_i=j^{sa}-j_{ik}-l_{sa}}^{()} \\
 &\quad \sum_{n_i=n+1}^n \sum_{(n_i-j_{ik}-j_s+1)}^{(n_i-j_{sa}+1)} \sum_{n_{is}=n-j_i+1}^{(n_i-j_{ik}-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_i-j_{sa}+1)} \\
 &\quad - \frac{(n_i - n_{is} - 1)!}{(j_s - l_i - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad - \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\quad - \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad - \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad - \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad - \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad - \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

güldin

$$\begin{aligned}
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_t+n-D-s+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}} \\
& \sum_{(n_{ik}+j_{ik}-\mathbb{k})}^{(n_{sa}=n-j_{sa}+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_{sa}-j_i} \\
& \frac{(n_i - n_{is} + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_t+n-D-s+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!} \cdot$$

$$\frac{(l_s - l - 1)! \cdot (j_s - s - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s - 1)!}.$$

$$\frac{(D - s)!}{(D - j_i - \mathbf{n} - 1)! \cdot (n - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} - s \wedge j_{sa}^{ik} + s - 1 \leq j_i \leq j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge j_{sa}^{ik} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s, j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa} \wedge$$

$$s \geq \mathbb{k} \wedge s = s + \mathbb{k} \wedge$$

$$\exists z : z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l - j_{sa}^{ik} + 1)!}{(j_s + l - j_{ik} - l + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_s+s-l+1}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - 1)!}{(\mathbf{l}_s - \mathbf{l} + 1 - l + 1)! \cdot (l - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right. \left.\right)} \quad$$

$$\sum_{j_{ik}=j^{sa}}^{\Delta} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right. \left.\right)} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_i-j_s+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right. \left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\right. \left.\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, J_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_s+j_{sa})} \sum_{n_i=n+\mathbb{k}}^{n_{is}+j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{(\mathbf{l}_s - l + 1)} \sum_{(j_s + \mathbf{l}_s - k + 1) + \mathbf{n} - D}^{(\mathbf{l}_s - l + 1)}$$

$$\sum_{\substack{j_{ik} = j^{sa} + l_{ik} - l \\ j_{sa} = l_s + j_{sa} - l}}^{(l_s - l + 1)} \sum_{\substack{j_i = j^{sa} + l_i - l_{sa} \\ j_{ik} = j^{sa} + l_{ik} - l_{sa}}}^{(l_s - l + 1)}$$

$$\begin{array}{c} n \\ \square \\ n_i = n - j_s \\ \square \\ n_{is} = n + \mathbb{k}_1 - j_s + 1 \\ \square \\ n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1 \end{array}$$

$$\sum_{a=n-j^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}+\mathbb{k}_2-1} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j-\mathbb{k}_2)}^{(\)} n_s=n_{sa}+j-\mathbb{k}_1$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s) \cdot (j_i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_s - n - j^{sa} - l - \mathbf{n} - l_{ik} - \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s < D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + \mathbf{n} - l - \mathbf{n} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge \mathbb{N} = \mathbb{k} >= \mathbb{k}_1 \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, l - \mathbb{k}_1, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s + \mathbb{k}_1 = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=n-j_i+1}^{n_{sa}+j^{sa}-} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)} \\
& \sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{n_s=n-j_i+1}} n_{sa} + j^{sa} - j_i$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_l - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\infty} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\infty}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - l_i - 1)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}}^{\mathbf{l}_{sa} + \mathbf{n} - D - j_{sa}} \sum_{(j_s = \mathbf{l}_s + \mathbf{n} - D)}^{(\mathbf{l}_{sa} + \mathbf{n} - D - j_{sa})}$$

$$\sum_{j_{ik} = \mathbf{l}_{sa} + \mathbf{n} + j_{sa}^{ik} - D - j_{sa}}^{j_s = \mathbf{n} - l - j_{sa} + 1} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{\left(\right)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s) \cdot (j_{ik} - j_s - \mathbf{l}_s + 1)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l}_i)!}{(\mathbf{l}_s - n - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l_{sa}+n-D-j_{sa}+1}^{l_{sa}+n-k-l-j_{sa}+1} \sum_{j_{ik}=j_s+j_{sa}-k-j_{ik}+l_{sa}-l_{ik}}^{(\mathbf{l}_s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{(\mathbf{l}_{ik}-1)} \sum_{i=l_{sa}+n-j_{sa}+1}^{l_{sa}+l_i-1} \sum_{i=j^{sa}+l_i-l_{sa}}^{j^{sa}+l_{ik}-1}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{l_{sa}+l_{ik}-1} \sum_{i=j_{ik}+l_{sa}-1}^{j^{sa}+l_{ik}-1} \sum_{i=j^{sa}+l_i-l_{sa}}^{j^{sa}+l_{ik}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^{n-\mathbb{k}} \sum_{i=n+\mathbb{k}-j_s}^{n-\mathbb{k}-j_s} \sum_{i=n_{ik}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_s - j_i - j_{ik} - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - j_{sa}^{ik} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq n \wedge l_s > n - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{l_{ik}-l} \sum_{(j_s=l_s+n-1)}^{(j_{ik}-j_{sa}+1)} \\ \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(j^{sa}=j_i+l_{sa}-n, j_{ik}=j_{sa}+n-j_{sa})} \\ \sum_{n_i=n+j_{ik}-l}^{(n_i-j_s)} \sum_{n_{is}=n+j_{ik}-j_i}^{(n_{is}+j_s-j_{ik}-1)} \\ \sum_{(n_{sa}=n-j_i+1)}^{(n_{sa}=n-j_i+1)} \sum_{n_s=n-j_i+1}^{(n_s=j^{sa}-j_i)} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - l)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\ \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=\mathbf{l}}^{\mathbf{(l_s-l+1)}} \sum_{(j_s=l_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{} \sum_{j_i=l_s+s-l+1}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_2=n_{sa}-j_i)}^{} \sum_{(n_{sa}=n_s+j^{sa}+1)}^{n_{sa}-j_i} \sum_{n_s=\mathbf{n}-j_i-\mathbb{k}_2+1}^{n_{sa}-j_i}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{ik} + j_s - 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(n_s - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{(l_s-j_{ik}-j_{sa}^{ik}+1)}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\mathbf{l}_s)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{} \sum_{j_i=l_{ik}+s+\mathbf{n}-D-j_{sa}^{ik}}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-i_s}^{(n_i-j_s+1)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot (3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + s - 1 \leq j_i \leq l_s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa}^{ik} = l_{ik} \wedge j_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} \wedge$$

$$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}\} \wedge$$

$$s \geq \dots \wedge s = s + \mathbb{k} \wedge$$

$$\exists z : z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k} \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{\left(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1) \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - l - j_{sa}^{ik} + 1)!}{(j_s + l - j_{ik} - l + 1) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\left(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1\right)} \sum_{(j^{sa}=l_s+j_{sa}-l+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_l=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{\left(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - l - \mathbf{l} + 1) \cdot (\mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - l_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{i_{ik}=j^{sa}+l_i-l_{sa}}^{n} \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{(\mathbf{n}_s+j_{sa}-l)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, J_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=n-D}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}, j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s+j_{sa}^{ik}+n-D)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{ik}-l+1} \quad \quad \quad j_{sa}=j_{ik}+l_{sa}-n_i \quad \quad \quad j_i=j^{sa}+l_i-l_{sa}$$

$$\sum_{n_i=n+k_1-j_{ik}}^n \quad \quad \quad n_{is}=n+k_2-j_{ik}-\mathbb{k}_1$$

$$\sum_{a=n-j^{sa}+1}^{n_i-k_1+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2} \quad \quad \quad n_{ik}=n+\mathbb{k}_2-j_{ik}+1$$

$$\sum_{a=n-j^{sa}+1}^{n_i-k_1+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2} \quad \quad \quad n_{sa}+j^{sa}-j_i$$

$$\sum_{n_s=n-j_i+1}^{n_{ik}-n_{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\begin{aligned} & \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\infty} \sum_{j_i=j^{sa}+l_i-1}^{\infty} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-\mathbb{k}_1}^{n_i-j_s+1} \\ & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j_{sa}^s}^{\infty} \\ & \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_s - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_s - \mathbf{n} - \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot \\ & \frac{1}{(j_{sa}^s - j_s - s)!} \cdot \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \end{aligned}$$

$$\begin{aligned} & D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa}^{ik} - 1 \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge \mathbb{k} = \mathbb{k}_2 > \mathbb{k}_1 \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, i, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \leq j_{sa}^s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}+\mathbf{n}-D-j_{sa}^{ik})} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}^{\infty}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{} \sum_{n_l=n+\mathbb{k}}^n$$

$$\sum_{n_{is}=n+\mathbb{k}-j_s+1}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{\left(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2) \cdot (n_i-n_{is}+1)!}.$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s+1) \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{sa}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{} \sum_{n_l=n+\mathbb{k}}^n$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\substack{n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_l)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l} - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l} - j_{ik} - \mathbf{l} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(\mathbf{l}_s - \mathbf{l} + 1)} \sum_{(j_s = \mathbf{l}_{ik} + \mathbf{n} - D - j_{sa}^{ik} + 1)}^{(\mathbf{l}_s - \mathbf{l} + 1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\)} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i - 1)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=\mathbf{l}}^{(l_s - l + 1)} \sum_{(j_s = l_s + n - D)}^{(l_s - l + 1)}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}}^n \sum_{(j_{sa} = j_i + l_{sa} - l_i)}^{\left(\right)} \sum_{j_i = l_i + n - D}^{l_i - l + 1}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} - j_{sa} + 1)}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j_{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - \mathbf{l}_s + 1)!}.$$

$$\frac{(D - l_i)!}{\mathbf{n} - l_i \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{l_i=l}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{l_s+s-l}$$

$$\sum_{j_{ik}=j}^n \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\binom{\mathbf{n}}{2}} \sum_{j_i=l_i+\mathbf{n}-D}^{l_s+s-l}$$

$$\sum_{l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\sum_{i=1}^{l_s+s-l}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{\mathbf{n}}{2}} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\sum_{i=1}^{l_s+s-l}}$$

$$\frac{3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=n+j_{sa}-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \sum_{\substack{(l_i+j_{sa})-s+1 \\ (n_i-j_i+1)}} \sum_{\substack{n_i=n+\mathbb{k} \\ (n_{is}=n+\mathbb{k}-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ (n_{sa}=n-j^{sa}+1)}} \sum_{\substack{n_s=n-j_i+1 \\ (n_s=j^{sa}+1)}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\binom{\mathbf{n}}{\mathbf{k}}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{\mathbf{n}}{\mathbf{k}}} \sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{\binom{\mathbf{l}_s+j_{sa}-l}{l}} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s, j_{sa}-l_{sa})}^{\binom{\mathbf{l}_s+j_{sa}-l}{l}} \sum_{n_i=\mathbf{n}+\mathbf{k}-(n_{ik}-j_{ik}+j_{sa}-s)}^{\binom{\mathbf{n}_i-j_s+1}{\mathbf{n}_i-j_s+1}} \sum_{n_{ik}=n_{sa}+j_{sa}-j_i-\mathbf{k}_1}^{\binom{\mathbf{n}_i-j_s+1}{\mathbf{n}_i-j_s+1}} \sum_{(n_{sa}=n_{sa}+j_{ik}-j^{sa}, n_s=n_{sa}+j^{sa}-j_i)}^{\binom{\mathbf{n}_s-j_s+1}{\mathbf{n}_s-j_s+1}} \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - s - s - 2 \cdot \mathbf{k} - \mathbf{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbf{k} - \mathbf{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\begin{aligned} D \geq \mathbf{n} &\wedge \mathbf{n} && \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge \\ D + l_s + s - l_i + l_{sa} &- l_{ik} \leq l \leq D - \mathbf{n} + 1 \wedge \\ 2 \leq j_s &\leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ j_{ik} + j_{sa} - j_{sa}^s &\leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ \mathbf{l}_{ik} - j_{sa}^s + 1 &> \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=n+\mathbf{l}_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-s-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}-1}^{n_{is}+j_s-\mathbb{k}_1}$$

$$\sum_{j_s=j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=j^{sa}+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-j_{sa}^{ik}+1)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n+\mathbb{k}-j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - \mathbb{k} - l_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - l_1 - j_{sa})!}.$$

$$\frac{1}{(n + \mathbb{k} - j_s - s)!}$$

$$\frac{(l_s - l + 1)!}{(l_s - j_s - l + 1) \cdot (j_s - 2)!}.$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + \mathbb{k} \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq \mathbb{k} \wedge D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - \mathbb{k} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > \mathbb{k} \wedge l_{sa} + j_s - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = \mathbb{k} + \mathbb{k} \wedge$$

$$\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_s + \mathbf{n} - D)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=j-n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2) \cdot (n_i-n_{is}+1)!}.$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{sa}+1) \cdot (n_{is}+j_{ik}-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{sa}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=l}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{ }$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - l)^!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l + 1)^!}{(D + j_{ik} - \mathbf{n} - l_i)^! \cdot (n - j_i)^!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - l_{ik} \wedge l_i - j_{sa} - s = j_i \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^i = j_{sa}^{ik} - 1$$

$$s: \{j_s^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \neq 4 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_{z+1} = 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=\mathbf{l}_s+n-D)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{n} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}+j^{sa}-j_i)}} \sum_{n_s=\mathbf{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_l - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_{ik} - j_{sa}^{ik} + 1) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^n \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - l_i - 1)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$${}_{fz}S_{j_s, \mathbf{j}_{ik}, j_{sa}^{sa}, j_i} = \sum_{k=\mathbf{l}}^{\mathbf{l}_s - \mathbf{l} + 1} \sum_{(j_s = \mathbf{l}_s + \mathbf{n} - D)}^{(l_s - l + 1)}$$

$$\sum_{j_{ik} = \mathbf{l}_{sa} + \mathbf{n} + j_{sa}^{ik} - D - j_{sa}}^{j_{sa} + j_{sa}^{ik} - \mathbf{l} - j_{sa} + 1} \sum_{(j_{sa}^{sa} = j_{ik} + \mathbf{l}_{sa} - \mathbf{l}_{ik})} \sum_{j_i = j_{sa}^{sa} + \mathbf{l}_i - \mathbf{l}_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} - j_{sa} + 1)}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j_{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - \mathbf{l}_s + 1)!}.$$

$$\frac{(D - l_i)!}{\mathbf{n} - \mathbf{l}_i \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{l_{sa}}^{\mathbf{l}_s - j_{ik} - l} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(j_s)}$$

$$\sum_{j_{ik} = l_{sa} + j_{sa}^{ik} - D}^{l_{sa} - j_{ik} - l} \sum_{(j_s = j_{ik} + l_{sa} - l_{ik})}^{(j_s)} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{(n_i - j_s + 1)}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\mathbf{l}_s)} \sum_{n_s = n_{sa} + j^{sa} - j_i}^{(n_i - j_s + 1)}$$

$$\frac{3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(2 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s, \mathbf{j}_i, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{j_k+s-l-j_{sa}^{ik}+1} \sum_{i_{ik}=j^{sa}, i_{sa}=l_s}^{(n_i-j_s+1)} \sum_{(j_{sa}=n+j_{sa}-1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=n-j_i+1}^{(n_i-n_{is}-1)!} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\ \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\ \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\ \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\infty} \sum_{\substack{() \\ (j_s=j_{ik}-j_{sa}^{ik}+1)}} \sum_{\substack{() \\ (j_{ik}=j^{sa}+l_{ik}-l_{sa})}} \sum_{\substack{() \\ (n_{is}+l_{sa}-l_i) \\ (j_l)}} \sum_{\substack{() \\ (s+n-D-j_{sa}^{ik})}} \\ \sum_{\substack{() \\ (n_i=n+\mathbb{k}) \\ (n_{sa}=n+\mathbb{k}-j_s)}} \sum_{\substack{() \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}} \sum_{\substack{() \\ (n_{sa}=n_{ik}+j_s-j_{sa}-\mathbb{k}_2)}} \sum_{\substack{() \\ (n_s=n_{sa}+j^{sa}-j_i)}} \\ \sum_{\substack{() \\ (n_{is}+2 \cdot j_s-n_s-j^{sa}-j_i-s-2 \cdot \mathbb{k}-\mathbb{k}_1)!}} \sum_{\substack{() \\ (3 \cdot n_{is}+2 \cdot j_s-n_s-j^{sa}-j_i-\mathbf{n}-2 \cdot \mathbb{k}-\mathbb{k}_1-j_{sa}^{ik})!}}$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, l_{ik}, j^{sa}, j_i} = & \sum_{k=l}^{(l_s - l + 1)} \sum_{s=l_s + n - D}^{(l_s - l + 1)} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-l-j_{sa}^{ik})}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} j_i=j^{sa}+l_{ik}-l_{sa} \\
& \sum_{n_i=j^{sa}+l_{ik}-l_{sa}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_j+l_{ik}-l_{sa}}^{(n_i-j_s+1)} n_{sa}=n_j+l_{ik}-l_{sa} \\
& \frac{(n_i-n_{is}-1)!}{(n_{is}-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-1)!}{(n_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-l-1)!}{(l_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -
\end{aligned}$$

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$$\begin{aligned}
& \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+l_i-l}^{\infty} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\infty} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{\infty} n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1 \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{\infty} n_s=n_{sa}+j_{sa}^{ik} \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - \mathbf{n} - j_{sa}^{ik} - \mathbb{k} - j_{sa})!} \cdot \\
& \frac{1}{(j_{sa}^{ik} - j_s - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \\
& D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge \\
& D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge \\
& 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
& j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_{sa} + j_{sa}^{ik} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\
& l_{ik} - j_{sa}^{ik} + s = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
& D > \mathbf{n} \wedge I = \mathbb{k} \geq 0 \wedge \\
& j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge \\
& \{j_{sa}^i - 1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge \\
& s \geq 4 \wedge s = s + \mathbb{k} \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow
\end{aligned}$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i-j_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\frac{(n_{ik}+j_{ik}-\mathbb{k}_2) \cdot n_{sa} - j^{sa} - j_i}{(n_{sa}=n_{is}+1) \cdot n_s=n-j_s-1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2) \cdot (n_i - n_{ik} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_i + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_s - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{l_{ik}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{} \sum_{n_s=n_{sa}+j^{sa}-i_s} \\
& \quad \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot (D - l - s)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!} \cdot \\
& \quad \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot \\
& \quad \frac{(D - l - s)!}{(D - l_i - n - s + j_i - n - j_i)!}
\end{aligned}$$

$$\begin{aligned}
& D \geq n < n \wedge l_s > D - n + 1 \wedge \\
& 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge \\
& j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + s - 1 \leq j_i \leq l_i \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa}^{ik} > l_{ik} \wedge j_{sa} + j_{sa} - s > l_{sa} \wedge
\end{aligned}$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$\begin{aligned}
& j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} \wedge \\
& s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}\} \wedge
\end{aligned}$$

$$s \geq \dots \wedge s = s + \mathbb{k} \wedge$$

$$\exists z : z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k} \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_l)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_{ik}+s-l-j_{sa}^{ik}+2}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + l - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(n - l - 1)!}{(l_s - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + l_s - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_i+n-D}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\varsigma_{i_c, i_s, i_{ik}, l_s, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{i_k=l_s+n+j_{sa}^{ik}-D-1}^{r_a+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_s+s-\mathbf{l}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - j_{sa})!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_{sa} - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l}_i)!}{(n - \mathbf{l}_i)! \cdot (n - n - \mathbf{l}_i)! \cdot (n - j_i)!}.$$

$$\sum_{l=s}^{l_s+j_{sa}^{ik}-l} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{l_{sa}-l+1} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{=l_s+n+j_{sa}^{ik}-l}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_{sa}-l+1} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{j_{ik}=n+\mathbb{k} \\ j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\substack{j^{sa}=j_i+j_{sa}-s \\ j^{sa}=j_{sa}+j^{sa}-j_i}} \sum_{\substack{j_s=j_{ik}+l_s-l \\ j_s=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\substack{() \\ l_s+s-l}}$$

$$\sum_{\substack{n=\mathbb{k} \\ n=n+\mathbb{k}}}^n \sum_{\substack{() \\ n_{is}=n+j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\substack{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ () \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i \\ n_s=n_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\substack{() \\ l_s+s-l}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_i - n_s - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(n_{is} + 3 \cdot j_s - n_s - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s, j_{ik}, j^{sa}, j_i, l_s, l_{ik})} \frac{\binom{n}{l_i + n + j_{sa} - D - s - 1}}{\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{j^{sa}+j_{sa}^{ik}-j_{sa} - (l_i + n + j_{sa} - D - s - 1)}{(j^{sa}+j_{sa}^{ik}-j_{sa} - (l_i + n + j_{sa} - D - s - 1))!} \cdot \binom{n_i - j_s + 1}{n + \mathbb{k} (n_{is} - \mathbb{k} - j_s + 1) + j_{ik} - j_{sa} - \mathbb{k}_1} \cdot \binom{n_{is} + j_s - j_{ik} - \mathbb{k}_1}{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \cdot \binom{n_{sa} + j^{sa} - j_i}{n_{ik} + j_{ik} - n_{sa} - j^{sa}} \cdot \binom{n_i - n_{is} - 1}{2}! \cdot (n_i - n_{is} - j_s + 1)! \cdot \binom{n_{is} - n_{ik} - 1}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \binom{n_{ik} - n_{sa} - 1}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \binom{n_{sa} - n_s - 1}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \binom{n_s - 1}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \binom{\mathbf{l}_s - \mathbf{l} - 1}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

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$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_l=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+j_{is}-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+j_{ik}-\mathbb{k}_1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+j_{sa}-1)}^{(n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2)} \sum_{j_s=j_{sa}-n-j_i+1}^{n_{sa}+j^{sa}-s}$$

$$\frac{(-n_{is}-1)!}{(s-2)! \cdot (s-n_{is}-j_s+1)!}.$$

$$\frac{(n_i-n_{ik}-1)!}{(s-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\lvert \mathbf{l} \rvert} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\lvert \mathbf{j} \rvert}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_i}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_2)}^{(n_{sa}-\mathbf{n}+s-1)} n_{sa} - j_i$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\lvert \mathbf{l} \rvert} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\lvert \mathbf{j} \rvert}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^{\infty}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\infty} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{\infty} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{is}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s) \cdot (\mathbb{k} - l_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{m}_1 - l_{sa})!}.$$

$$\frac{1}{(\mathbf{n} + \mathbb{k} - j_s - s)!}$$

$$\frac{(l_s - l)^{l_s - l}}{(l_s - l - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{n} - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + \mathbb{k} \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{m} \geq 0 \wedge$$

$$j_{sa} \leq j_i - 1 \wedge j_{sa}^{ik} = j_i - 1 \wedge j_{sa}^o = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^1, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq j_{sa}^i \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge z = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_i+\mathbf{n}+j_{sa}-D-s-1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{sa} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - j_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_{is} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\)}$$

$$\sum_{j_{ik}=\mathbf{l}_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\mathbf{l}_i+n+j_{sa}-D-s)}^{(\mathbf{l}_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{l}_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\mathbf{n}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j^{sa} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_s+\mathbf{n}+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_l=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\mathbf{n}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + l - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(n - l - 1)!}{(l_s - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^{\infty} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{i_c, i_s, i_a, j_l} = \sum_{k=l}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-\mathbf{l}_s)}^{(\left.)\right.} \\ \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_{sa}-l+1)} \sum_{j_l=l_i+\mathbf{n}-D}^{l_i-l+1} \\ \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_{sa} - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l}_i)!}{(\mathbf{l}_s - n - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{i=l}^{\mathbf{n}} \sum_{\substack{j_s = j_{ik} + l_s - \mathbf{l}_s \\ j_{ik} + j_{sa} - \mathbf{n} + j_{sa}^{ik} \\ j_{ik} + j_{sa} - j_{sa}^{ik}}} \sum_{i=k}^{l_i - l + 1}$$

$$\sum_{i=k}^{-l+1} \sum_{\substack{j_s = j_{ik} + l_s - \mathbf{l}_s \\ j_{ik} + j_{sa} - \mathbf{n} + j_{sa}^{ik} \\ j_{ik} + j_{sa} - j_{sa}^{ik}}} \sum_{i=k}^{l_i - l + 1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+\mathbb{k}-j_s+1)}} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\mathbf{i}=\mathbf{l}}^{\mathbf{l}_{ik}-\mathbf{l}+1} \sum_{(j_s=j_{ik}+l_s-s)}^{l_{ik}-l+1}$$

$$\sum_{\mathbf{i}=\mathbf{l}_i+\mathbf{n}+j_{sa}-s}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{sa}+j_{sa}-j_{sa}^{ik})}^{l_{ik}-l+1} \sum_{(j_{ik}-j_{sa})}^{l_{ik}-l+1}$$

$$\sum_{\mathbf{i}=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+j_s+1)}^{i-j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{i-j_s+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{i-j_s+1} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{i-j_s+1}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_i - n_s - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(n_{is} + 3 \cdot j_s - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, l_{ik}, j^{sa}, j_i} = \sum_{k=l}^{l_t+n+j_{sa}^{ik}-D-s-1} \sum_{(j_s, l+1)}^{()} \sum_{j_i=l_t+n-D}^{l+1}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_t+n+j_{sa}^{ik}-D-s-1} \sum_{(j_{sa}+n-D, j_i=l_t+n-D)}$$

$$\sum_{n}^{n_i-j_s+1} \sum_{(n_{is}-\mathbb{k}_1-j_s+1, n_{ik})}^{(n_i-j_s+1)} \sum_{j_{ik}=j_{ik}+1}^{n_s+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{a=n-j^{sa}+1}^{(n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(n_{is} - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_{ls}=l_s+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+j_{ik}-\mathbb{k}+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}-1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2)} \sum_{(n_{sa}=n-j_{sa}+1)}^{n_{sa}+j^{sa}-s}$$

$$\frac{(n_{ik}-n_{ik}-1)!}{(j_s-2)! \cdot (j_s-n_{is}-j_s+1)!}.$$

$$\frac{(n_{ik}-n_{ik}-1)!}{(j_s-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}^{ik}}^{(\)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-k_1}^{(\)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j_{sa}^s}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j_{sa}^s - s - k - k_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - n_{ik} - j_{ik} - j_{sa}^s - j_{sa})!}.$$

$$\frac{1}{(j_{sa}^s - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa}^{ik} - 1 \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge k > n \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, i, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \leq j_{sa}^s \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(\)}$$

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$$\begin{aligned}
& \sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
& \sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=n-j_i+1}^{n_{sa}+j^{sa}} \\
& \frac{(n_i-l_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{sa}-1) \cdot (n_{is}+j_{sa}-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
& \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}
\end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{D}} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)}^{(\mathbf{l}_{ik}-\mathbf{l}-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+\mathbf{l}_{ik}-\mathbf{l}_s}^n \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - l)^!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{ik}) \cdot (\mathbf{n} - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{is} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > j_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^s = j_{sa}^{ik} - s \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{n} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j^{sa}+1}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=n-j_i+1}^{n_{sa}-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + n - l - 1)! \cdot (n_s - j_i)!} \cdot$$

$$\frac{(n - l - 1)!}{(l_s - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{l_i-l+1}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{n_i-j_s+1} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_i+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{l}_s - \mathbf{l} + 1} \sum_{(j_s = \mathbf{l}_i + \mathbf{n} - D - s + 1)}^{(l_s - l + 1)}$$

$$\sum_{j_{ik} = s + l_{ik} - l_s}^n \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{\left(\right)} \sum_{j_i = j^{sa} + s - j_{sa}}^{()}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{n_{ik}}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{\left(\right)} \sum_{n_s = n_{sa} + j^{sa} - j_i}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f z^{\omega_j, j_{ik}, j^{sa}, j_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \sum_{(l_{ik}-l+1)}^{(l_{sa}-l+1)} \sum_{(l_i-l+1)}$$

$$\sum_{j_{ik}=n-\mathbb{k}}^{n} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{j_{ik}=l \\ j_{ik}=j^{sa}+j_{sa}-j_{sa}}} \binom{j_s=j_{ik}+l_s-s}{j_{ik}} \binom{j_s=j_{ik}+l_s-s}{j_{sa}}$$

$$\sum_{\substack{j_{ik}=j^{sa}+j_{sa}-j_{sa} \\ j_{ik}=j^{sa}+j_{sa}-s}} \binom{j^{sa}+j_{sa}-s}{j_{ik}} \binom{j^{sa}+j_{sa}-s}{j_{sa}} \sum_{\substack{j_i=s-l-j_{sa}+1 \\ j_i=s-n-D}}$$

$$\sum_{\substack{n+\mathbb{k} \\ n+\mathbb{k} \\ (n_{is}=n+j_s-j_s+1)}}^n \sum_{\substack{j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ n_s=n_{sa}+j^{sa}-j_i}}^n \sum_{\substack{n_{is}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1 \\ n_s=n_{sa}+j^{sa}-j_i}}$$

$$\frac{(3 \cdot n_{is} + \Delta^{si} - n_s - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(n_{is} + 3 \cdot j_s - n_s - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_s, j_{ik}, l_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{} \dots$$

$$\sum_{j_{ik}=j_s-j_{sa}^{ik}}^{\infty} \sum_{(j^{sa}=j_{sa}+n-D)}^{\infty} \sum_{j_i=l_i+n-D}^{(j_i+j_{sa}-s-l_{sa}+s-l-j_{sa}+1)} \dots$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \dots$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{sa}+j_{ik}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{sa}-\mathbf{l}-1)} \sum_{(j_{sa}=l_{sa}+\mathbf{n}-D)}^{n} \sum_{l_{sa}+s-l-j_{sa}+2}^{l_{sa}+s-l-j_{sa}+2}$$

$$\sum_{n_i=n-\mathbf{k}_1}^n \sum_{n_{is}=n+\mathbf{k}_1-\mathbf{l}_s+1}^{n_i-j_s} \sum_{n_{ik}=n+\mathbf{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbf{k}_1}$$

$$\sum_{n_a=n-j^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbf{k}_2) } \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\begin{aligned}
& \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_i+n-D}^{l_{sa}+s-l-j_{sa}+1} \\
& \sum_{n_i=n+k}^{\infty} \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}}^{n_i-j_s+1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}}^{\infty} \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_{sa} - s - k - k_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_{sa} - n - k - k_1 - j_{sa})!} \cdot \\
& \frac{1}{(j_{sa}^s - j_s - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
& D \geq n < n \wedge l_s > D - n + 1 \wedge \\
& 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
& j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa}^{ik} - 1 \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\
& D \geq n < n \wedge k > k \wedge \\
& j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\
& s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge \\
& s > j_{sa}^s = s + k \wedge \\
& k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow
\end{aligned}$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{ik}+s-l-j_{sa}^{ik}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_i-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(l_s-1)!}{(l_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!} \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=\mathbf{l}}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=l_{ik}+s-l-j_{sa}^{ik}+2}^{l_i-\mathbf{l}+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_i - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa} - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j^{sa}=\mathbf{l}_s+\mathbf{n}+j_{sa}-D-1)}^{(j_i+j_{sa}-s)} \sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{l_s+s-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa}) \cdot (j_i + j_{sa} - \mathbf{l} - s)!}.$$

$$\frac{(\mathbf{l}_i - l_i)!}{(i - \mathbf{n} - l_i + 1) \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{i=l}^{n-s} \sum_{\substack{j_s=j_{ik}-j_{sa}+1 \\ j_{ik}=s+a+j_{sa}}} \left(\sum_{\substack{j_{sa}=s+a-j_{ik} \\ j_{sa}=n+j_{sa}-D-1}} \right)$$

$$\sum_{\substack{j_{sa}=s+a+j_{sa} \\ j_{sa}=n+j_{sa}-D-1}} \sum_{i=s+l}^{n-j_{sa}-l} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{\substack{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1) \\ n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=l}^{\infty} \sum_{\substack{() \\ (j_s=j_{ik}+j_{sa}+1)}} \sum_{\substack{() \\ (j^{sa}=j_i+j_{sa}-s) \\ (j_i=l_i+n-D)}} \sum_{\substack{() \\ (n_i=n+\mathbb{k}-j_{ik}-\mathbb{k}_1) \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}}$$

$$\sum_{\substack{() \\ (n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2) \\ (n_s=n_{sa}+j^{sa}-j_i)}} \sum_{\substack{() \\ (n_{is}=n+\mathbb{k}-j_{is}-\mathbb{k}_1) \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j_i - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i \wedge j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\ \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_{sa})}^{\infty} \sum_{j_i=n-\mathbb{k}_2-D}^{\infty} \\ \sum_{n_i=n+\mathbb{k}_1-j_{ik}+1}^n \sum_{(n_i-j_s=j_{ik}-j_{sa}+1)}^{\infty} \sum_{n_{is}+j_s-j_{ik}=j_{sa}}^{\infty} \\ \sum_{(n_{sa}=n-j_{sa}+1)}^{\infty} \sum_{n_s=n-j_i+1}^{\infty} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - j_{is} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_{is} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\ \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_1)}^{(n_{sa}=n_{is}-s+1)} \sum_{n_{sa}=n_{is}-s-a-j_i}^{n_{sa}-j_{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_s - 1)! \cdot (j_s + 1)!} \cdot$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-i_s} \\
 & \quad \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot \dots}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})} \cdot \\
 & \quad \frac{(j_s - s)!}{(l_s - l - 1)!} \cdot \\
 & \quad \frac{(l_s - j_s - s + 1)! \cdot (j_s - s)!}{(D - j_i - n - s)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

$$\begin{aligned}
 & D \geq n < n \wedge l_s > D - n + 1 \wedge \\
 & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + s - 1 \leq j_i \leq \dots \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa}^{ik} = l_{ik} \wedge j_{sa} - s > l_{sa} \wedge
 \end{aligned}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\begin{aligned}
 & j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} \wedge \\
 & s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa} - \mathbb{k}_2, j_{sa}, \dots, j_{sa}^{ik}\} \wedge
 \end{aligned}$$

$$s > \dots \wedge s = s + \mathbb{k} \wedge$$

$$\exists z : z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(l_i+n+j_{sa}-D-s-1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa} - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right. \left.\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{l_i-l+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_l=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - 1)!}{(\mathbf{l}_s - \mathbf{l} + 1 - l - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_s - s)!}{(j^{sa} + \mathbf{l}_i - l - s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - 1)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\text{()}}$$

$$\sum_{j_{ik}=j^{sa}+j_i-j_{sa}}^{(j^{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{\text{()}} \sum_{j_i=j^{sa}+s-j_{sa}}^{\text{()}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\text{()}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\text{()}} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\text{()}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_s, j_{ik}, j_{sa}, l_i} = \sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{i_k=j^{sa}-j_{ik}+1}^{n+j_{sa}-D-1} \sum_{(j^{sa}=n+j_{sa}-D-1)}^{n+j_{sa}-D-1} \sum_{j_l=l_i+n-D}^{l_i-l+1}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(i_j-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{\substack{() \\ (j_s=j_{ik}-j_{sa}+1)}}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}-j_{sa}}^{(l_s+i_s-l)} \sum_{\substack{() \\ (j_{sa}=l_i+n+j_{sa}-1)}}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n-(j^{sa}-1)}^{n} \sum_{n_{is}=n+\mathbb{k}_1-j_{ik}+1}^{n_i-j_s} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{a=n-j^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\begin{aligned} & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{\infty} \sum_{j_i=j^{sa}+s-i}^{\infty} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}-\mathbb{k}_1}^{\infty} \\ & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j_{sa}^s}^{\infty} \\ & \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - \mathbf{n} - \mathbb{k} - j_{sa})!} \cdot \\ & \frac{1}{(j_{sa}^s - j_s - s)!} \cdot \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \end{aligned}$$

$$\begin{aligned} & D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa}^{ik} - 1 \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & D \geq \mathbf{n} < n \wedge \mathbb{k} > \mathbb{k}_1 \wedge \\ & j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\ & s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge \\ & s > j_{sa} = s + \mathbb{k} \wedge \\ & \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow \end{aligned}$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \frac{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-}{(n_{sa}=n-j^{sa}+1)} \sum_{n_{is}=n-j_i+1}^{\left(\right)} \\
& \frac{(n_i-j_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-j_i+1)!} \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{sa}-j_{sa}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(l_s-l-1)!}{(l_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!} \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=\mathbf{l}}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(j_s=j_{ik}-j_{sa}^{ik}-l_{sa}+1)} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\substack{n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^{\infty}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{sa}+j^{sa}-j_i}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i - 1)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)} \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{n+j_{sa}^{ik}-D-s-1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_i-\mathbf{l}+1} \\ \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}-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} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l} - s)!}.$$

$$\frac{(\mathbf{l}_i - l_i)!}{(i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{i=l}^{l_i-l+1} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{\infty}$$

$$\sum_{j_{ik}=n+\mathbb{k}}^{-l+1} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{} \sum_{(n_{sa}=n-j^{sa}+1)}^{(\mathbf{l}_i-j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=\mathbf{l}}^{\mathbf{l}_{ik}-\mathbf{l}+1} \sum_{(j_s=j_{ik}+j_{sa}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}-D-sa}^{l_{ik}-l+1} \sum_{(j_i=j^{sa}+s-j_{sa})}^{(\)}$$

$$\sum_{n_i=n+\mathbb{k}-j_{ik}}^n \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(i_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i \wedge j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
 & \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}^{ik})}^{\infty} \sum_{j_i=n-D}^{l_i-l+1} \\
 & \sum_{n_i=n-j_i+1}^n \sum_{(n_i-j_s)}^{n_i-j_s} \sum_{n_{is}+j_s-j_{ik}}^{n_{is}+j_s-j_{ik}} \\
 & \sum_{(n_{sa}=n_{is}-s+1)}^{n_{sa}=n_{is}-s+1} \sum_{n_s=n-j_i+1}^{j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - n_{ik} - \mathbb{k}_1 - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - n_{is} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{\lvert \mathbf{l} \rvert} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\lvert \mathbf{j} \rvert}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\lvert \mathbf{j} \rvert} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \frac{(n_{ik}+j_{ik}-j_{ik}^{ik}-1)!}{(n_{sa}=n-j_{sa}+1) \quad n_s=n-j_i} \cdot \frac{n_{sa}+j_{sa}-j_i}{(n_{sa}=n-j_{sa}+1) \quad n_s=n-j_i} \\
& \frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_i-j_s+1)!} \cdot \\
& \frac{(n_{ik}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-\mathbb{k}_1-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
& \frac{(n_{sa}-n_s-1)!}{(-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=l}^{\lvert \mathbf{l} \rvert} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\lvert \mathbf{j} \rvert}
\end{aligned}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\lvert \mathbf{j} \rvert} \sum_{j_i=j^{sa}+s-j_{sa}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{(j_s^s - s)!}{(l_s - l - 1)!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot \\ \frac{(D - \mathbf{n})!}{(D - j_i - \mathbf{n})! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} \wedge j^{sa} + s - j_{sa}^{ik} \leq j_i \leq j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge j_{sa}^{ik} + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^s - 1 \wedge j_{sa}^{ik} \leq j_{sa}^s - 1 \wedge j_{sa}^s < j_{sa}^{ik} \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^s - \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > \mathbb{k} \wedge s = s + \mathbb{k} \wedge$$

$$\exists z : z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right.} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n-j^{sa}+1)}}^{\sum_{(n_{sa}+j^{sa}-j_i)}} \sum_{n_s=n-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_l)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa} + 1) \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n-j^{sa}+1)}}^{\sum_{(n_{sa}+j^{sa}-j_i)}} \sum_{n_s=n-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - l - 1)!}{(\mathbf{l}_s - j_i - \mathbf{l} + 1) \cdots (\mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_s - s)!}{(j^{sa} + \mathbf{l}_i - s)! \cdots (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - l - 1)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_{sa}-l-j_{sa}+2)}$$

$$\sum_{j_{ik}=s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{j_{sa}=n+k}^{fz^{sa}} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)} \sum_{j_i=l_i+n-D}^{(l_i-l+1)}$$

$$\sum_{i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(\mathbf{l}_{ik}-\mathbf{l}-j_{sa}^{ik}+2)} \left[\begin{array}{c} \\ \end{array} \right]$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-s}^{(\mathbf{l}_{sa}+j_{sa}-s)} \left(\begin{array}{c} \\ \end{array} \right) \sum_{j_i=j^{sa}+s-j_{sa}}^{(\mathbf{l}_i-j_{sa}+\mathbf{l}-s+1)}$$

$$\sum_{n_i=n-(j^{sa}-s)}^{n} \left(\begin{array}{c} \\ \end{array} \right) \sum_{n_{is}=n+\mathbb{k}_1-(j^{sa}-s+1)}^{n_{is}-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{ik}+j_{ik}-j_{sa}+\mathbb{k}_2}$$

$$\sum_{n_a=n-j^{sa}+1}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\begin{aligned}
& \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\binom{n}{s}} \sum_{j_i=j_{sa}^{sa}+s-1}^{n} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{\binom{n_i-j_s+1}{s}} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}^s}^{} \sum_{n_s=n_{sa}+j_{sa}^s}^{} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^s-k_2)}^{\binom{n}{s}} \sum_{n_s=n_{sa}+j_{sa}^s}^{} \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - s - l - k - k_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j_{sa}^{sa} - s - l - n - k - k_1 - k_2)!} \cdot \\
& \frac{1}{(j_{sa}^s - j_s - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
& D \geq n < n \wedge l_s > D - n + 1 \wedge \\
& 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
& j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa}^{sa} - j_{sa} \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\
& D \geq n < n \wedge k > k \wedge \\
& j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\
& s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge \\
& s > j_{sa}^{ik} = s + k \wedge \\
& k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow
\end{aligned}$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}^{\binom{l_i+n-D-s}{s}}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=l_i+\mathbf{n}-D}^{l_i-l+1}$$

$$\sum_{n_l=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (j_s+n_{is}-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_l=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n-j^{sa}+1)}}^{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_i - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa} - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

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$$D>\pmb{n} < n$$

$$\frac{1}{(\pmb{n}+j_{sa}^s-j_s-s)!}.$$

$$\frac{(\pmb{l}_s-\pmb{l}-1)!}{(\pmb{l}_s-j_s-\pmb{l}+1)!\cdot(j_s-2)!}.$$

$$\frac{(D-\pmb{l}_i)!}{(D+j_i-\pmb{n}-\pmb{l}_i)!\cdot(\pmb{n}-\pmb{l}_i-1)!}.$$

$$D \geq \pmb{n} < n \wedge \pmb{l}_s > D - \pmb{n} + 1 \wedge$$

$$D+\pmb{l}_s+s-\pmb{n}-\pmb{l}_i+1 \leq \pmb{l} \leq D-\pmb{n}+1 \wedge$$

$$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \pmb{n} \wedge$$

$$\pmb{l}_{ik}-j_{sa}^{ik}+1=\pmb{l}_s \wedge \pmb{l}_{sa}+j_{sa}^{ik}-j_{sa}=\pmb{l}_{ik} \wedge \pmb{l}_i+j_{sa} \wedge$$

$$D \geq \pmb{n} < n \wedge I = \Bbbk > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^s < j_{sa}^{ik}-1 \wedge$$

$$\pmb{s}:\{j_{sa}^s,\cdots,\Bbbk_1,j_{sa}^{ik},\Bbbk_2,j_{sa},\cdots,j_{sa}^i\} \wedge$$

$$s>4 \wedge \pmb{s}=s+\Bbbk \wedge$$

$$\Bbbk_z:z=2 \wedge \Bbbk=\Bbbk_1+\Bbbk_2=$$

$${}_{fz}S_{j_s\;,j_{ik},j^{sa},j_i}=\sum_{k=\pmb{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\;)}\;$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{n}\sum_{(j^{sa}=l_{sa}+\pmb{n}-D)}^{(l_{sa}-l+1)}\sum_{j_i=l_i+\pmb{n}-D}^{l_i-l+1}$$

$$\sum_{n_i=\pmb{n}+\Bbbk}^n\sum_{(n_{is}=\pmb{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n+\Bbbk_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1}$$

$$\sum_{(n_{sa}=\pmb{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}\sum_{n_s=\pmb{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}.$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_i - s)!}.$$

$$\frac{(\mathbf{l}_i - l_i)!}{(l_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{i=l}^n \sum_{j_s=j_{ik}-j_{sa}+1}^{l_{sa}+s-l-j_{sa}+1} \dots$$

$$\sum_{j_i=j^{sa}+j_{ik}-j_s+1}^{n_i} \sum_{j_s=j_i+j_{sa}-s}^{l_{sa}+s-l-j_{sa}+1} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_i-j_s+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_i-j_s+1}$$

$$\frac{3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
& f(z) = \sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}^{ik}-j_{sa}^{ik}+1)} \sum_{j_{sa}=l_i+n+j_{sa}-D-j_{sa}^{ik}}^{(l_i-l+1)} \sum_{j_i=l_i+n-D}^{n_i} \\
& \sum_{n_i=n+\mathbb{k}}^{(n_{is}+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{sa}+1}^{(n_{is}+j_s-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

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$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{\substack{() \\ j_s=j_{ik}-j_{sa}^{ik}+}}^{\infty} \sum_{\substack{() \\ j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}}^{\infty} \sum_{\substack{() \\ j^{sa}=j_i+j_{sa}-s-j_{ik}-l_i+D}}^{\infty} \sum_{\substack{() \\ n_i=n+\mathbb{k}(n_{sa}-j_{sa}+1)+}}^{\infty} \sum_{\substack{() \\ n_{ik}=n_i-j_s-j_{ik}-\mathbb{k}_1}}^{\infty} \sum_{\substack{() \\ n_{sa}=n_i-j_{ik}-j^{sa}+}}^{\infty} \sum_{\substack{() \\ n_s=n_{sa}+j^{sa}-j_i}}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_s - n_{sa} - j^{sa} - s - l_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_s - n_{sa} - j^{sa} - j_{sa} - l_i - s - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - l_i + s - 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^s \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^s + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
&\quad \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_s+\mathbf{n}+j_{sa}-D-1)}^{(l_s+j_{sa}-l)} \sum_{(j_i+l_i+n-D)}^{l_i-l+1} \\
&\quad \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_{is}-1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}-1)}^{(n_{is}+j_s-\mathbb{k}_1)} \\
&\quad \sum_{(n_{ik}+j_{ik}-j^{sa}-1)}^{(n_{ik}+j_{ik}-j^{sa}-1)} \sum_{(n_{sa}+j^{sa}-j_i)}^{(n_{sa}+j^{sa}-j_i)} \\
&\quad \frac{(n_{ik}-n_{is}-1)!}{(j_s-2)! \cdot (n_{ik}+n_{is}-j_s+1)!} \cdot \\
&\quad \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(n_{is}-n_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
&\quad \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
&\quad \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
&\quad \frac{(l_s-1)!}{(l_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!} \cdot \\
&\quad \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
&\quad \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
&\quad \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}
\end{aligned}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{l_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-s}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(n - n_{sa} - j_s - s)!}$$

$$\frac{(l_s - l + 1)! \cdot (j_s - 2)!}{(l_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + s \wedge$$

$$D + l_s + s - n - l_i + 1 \leq j_s \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} - j_i + j_{sa} - s \wedge j_{ik} - s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = s \wedge l_{sa} + j_{sa}^{ik} - j_s = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 2 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \mathbb{k}_1, j_{sa}^i, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = \mathbb{k} + \mathbb{k} \wedge$$

$$\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=j^{sa}-}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2) \cdot (n_i-n_{is}-j_s+1)!}.$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{sa}-j_{sa}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=l}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\begin{array}{c} \\ \end{array}\right)} \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(n + j_{sa}^s - j_s - l)^!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)^!}{(D + j_{ik}) \cdot (n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - l_{ik} \wedge l_i - j_{sa} - s > l_i \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^i < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \neq 4 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_{z_1} = 2 \wedge \mathbb{k} = \mathbb{k}_1 - \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{\left(\begin{array}{c} \\ \end{array}\right)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^n \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \cdot n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa} - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(j_s=j_{sa}+s-j_{sa})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right. \left.\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right. \left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i - 1)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$zS_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j_{sa}^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j_{sa}^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j_{sa}^{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - 1)!}{(\mathbf{l}_s - \mathbf{j}_i - \mathbf{l} + 1) \cdot (\mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_s - s)!}{(j^{sa} + \mathbf{l}_i - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathcal{D} - 1)!}{(\mathcal{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{f=1}^{l+1} \sum_{(j_s=l_s+n-D)}^{(l+1)}$$

$$\sum_{\substack{i \\ i_{ik}=j_s+j_{sa}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=l}^{(\mathbf{l}-\mathbf{l}+1)} \sum_{(j_s = l_t + \mathbf{l} - \mathbf{l} + s + 1)}^{(l - l + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{j_{ik}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{ik}^s)}^{(j_{ik} + j_{sa} - j_{ik}^s)} \sum_{j_i = j^{sa} + s - j_{sa}}^{(j^{sa} + s - j_{sa})}$$

$$\sum_{n_i = n + \mathbb{k} - j_i}^{n} \sum_{(n_{ik} = n + \mathbb{k} - j_i - j_{ik})}^{(n + \mathbb{k} - j_i - j_{ik})} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_{is} + j_s - j_{ik} - \mathbb{k}_1)}$$

$$\sum_{(n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)}^{(n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i}^{(n_{sa} + j^{sa} - j_i)}$$

$$\frac{((n_{is} + 2 \cdot j_s - n_{sa} - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!) }{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n \wedge \mathbf{l}_s > \mathbf{n} - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{i-1} + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\ \sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa})}^{\infty} \sum_{i=l_i-D}^{l_{ik}-l-j_{sa}^{ik}+1} \\ \sum_{n_i=n+j_{ik}-j_{sa}^{ik}+1}^n \sum_{(n_i-j_s)}^{n_{is}+j_s-j_{ik}-j_{sa}} \sum_{n+ \mathbb{k}_2 - j_{ik} + 1}^{n_{is}+j_s-j_{ik}-j_{sa}} \\ \sum_{(n_{sa}=n-j_{sa}+1)}^{n_{is}+j_{sa}-1} \sum_{n_s=n-j_i+1}^{j^{sa}-j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - j_{is} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{sa} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_{is} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{(\)} \sum_{j_i=l_{ik}+s-l-j_{sa}^{ik}}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i-\mathbb{k}_1-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_1-j_{sa}+s-a-j_i)}^{(n_{ik}+j_{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=\mathbf{n}-j_{sa}+1)}^{n_{sa}+j_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_s - 1)! \cdot (j_s + 1)!} \cdot$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{l_{ik}+s-l-j_{sa}^{ik}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} n_s=n_{sa}+j^{sa}-i_s \\
 & \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})} \\
 & \quad \frac{(j_s - s)!}{(l_s - l - 1)!} \\
 & \quad \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \\
 & \quad \frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}
 \end{aligned}$$

$$\begin{aligned}
 & D \geq n < n \wedge l_s > D - n + 1 \wedge \\
 & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - s \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + s - 1 \leq j_i \leq l_s \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa}^{ik} > l_{ik} \wedge j_{sa} - s = l_{sa} \wedge
 \end{aligned}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\begin{aligned}
 & j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\
 & s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa} - \mathbb{k}_2, j_{sa}, \dots, j_{sa}^{ik}\} \wedge
 \end{aligned}$$

$$s > 0 \wedge s = s + \mathbb{k} \wedge$$

$$\exists z: z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(j_s=j_{ik}-j_{sa}^{ik}-1)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_i - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right. \left.\right)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - 1)!}{(\mathbf{l}_s - \mathbf{j}_i - \mathbf{l} + 1) \cdot (\mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - \mathbf{l}_s)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\mathbf{n}}$$

$$\sum_{=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\mathbf{n}} \sum_{j_i=l_i+\mathbf{n}-D}^{l_s+s-\mathbf{l}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_s+s-\mathbf{l}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\mathbf{n}} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\mathbf{n}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_s, j_{ik}, j_{sa}, l_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+s-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(l_{ik}=l_{ik}+s-D-j_{sa}-s)}^{(l_{ik}=l_{ik}+s-j_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_i}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=\mathbf{l}}^{l_{ik}-\mathbf{l}+1} \sum_{\substack{j_i=j_{ik}+j_{sa}^{ik}+1 \\ j_{ik}=l_{ik}+n-D \\ (j^{sa}+j_{sa}^{ik}-l-j_{sa}^{ik})+j_i=j^{sa}+s-j_{sa}}}^{\left(\begin{array}{c} l_{ik} \\ j_{ik} \end{array}\right)} \sum_{\substack{i_i=j^{sa}+s-j_{sa} \\ n_i=n+\mathbb{k}_1+j_{ik}-\mathbb{k}_2 \\ n_{is}=n+\mathbb{k}_2-j_{ik}+1 \\ n_{ik}=n+\mathbb{k}_2-j_{ik}+1 \\ n_{sa}+j^{sa}-j_i \\ n_{sa}=n-j^{sa}+1 \\ n_s=n-j_i+1 \\ n_{is}-n_{ik}-\mathbb{k}_1-1 \\ n_{is}-j_s-1 \\ n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1 \\ n_{ik}-n_{sa}-1 \\ n^{sa}-j_{ik}-1 \\ n_{ik}+j_{ik}-n_{sa}-j^{sa} \\ n_{sa}-n_s-1 \\ j_i-j^{sa}-1 \\ n_{sa}+j^{sa}-n_s-j_i \\ n_s-j_i \\ n_s-1 \\ n_s-\mathbf{n}-1 \\ n_s-j_i \\ (D - \mathbf{l}_i)! \\ (D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)! \\ (\mathbf{l}_s - \mathbf{l} - 1)! \\ (\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)! \\ (\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})! \\ (j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \\ (n_i - n_{is} - 1)! \\ (j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)! \\ (n_{is} - n_{ik} - \mathbb{k}_1 - 1)! \\ (j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)! \\ (n_{ik} - n_{sa} - 1)! \\ (j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})! \\ (n_{sa} - n_s - 1)! \\ (j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)! \\ (n_s - 1)! \\ (n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)! \\ (\mathbf{l}_s - \mathbf{l} - 1)! \\ (\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)! \\ (\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})! \\ (j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \\ (D - \mathbf{l}_i)! \\ (D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)! \end{array}\right)}$$

$$- \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{\infty} \sum_{j_i=j^{sa}+s-1}^{\infty}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-s)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - s - 2 - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - s - \mathbf{n} - 2 - \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(j^{sa} + j_{sa} - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > \mathbf{n} - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge \mathbb{k} = \mathbb{k} > \mathbb{k} \wedge$$

$$j_s - j_{sa} > 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{I}, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > \mathbb{s} \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_{sa}=n-j_i+1}^{n_{sa}+j^{sa}-} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+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)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
& - \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
& + \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)} \\
& \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

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$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_l)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\left(\right.\left.\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right.\left.\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.\left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\right.\left.\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_i+j_{sa}^{ik}-D-s-1} \sum_{(j_{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_i+j_{sa}-\mathbf{l}-s+1)} \sum_{j_i=j_{sa}+s-j_{sa}}^{n_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} - j_{ik} - n_{sa} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i - \mathbf{l} - 1)!}{(\mathbf{l}_i - j_i - \mathbf{l} + 1) \cdot (n - j_i)!}.$$

$$\sum_{l=1}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(l_i+j_i-n-l-s+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-n+j_{sa}-1}^{n+l+1} \sum_{(l_i+j_i-n-l-s+1)}^{(l_i+j_i-n-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\mathbf{l}_{ik}-\mathbf{l}+1} \left[\sum_{(j_s=j_{ik}, j_{sa}=j_{sa}^{ik}+1)}^{(\)} \right]$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D}^{l_{ik}-\mathbf{l}+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-j_{sa}}^{n_{ik}=n_{is}+j_s-j_{ik}-\mathbf{k}_1} \sum_{j_i=j^{sa}+s-j_{sa}}^{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbf{k}-j_s}^{n_i=n+\mathbf{k}-j_{sa}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbf{k}_1}^{n_{ik}=n_{is}+j_s-j_{ik}-\mathbf{k}_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2}^{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2}$$

$$\sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbf{k} - \mathbf{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbf{k} - \mathbf{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > \mathbf{n} > \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbf{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
 & \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_i+n+j_{sa})}^{(l_i+j_{sa}-l-s+1)} \sum_{(j_i=j^{sa}-j_{sa})}^{(n_i-j_s)} \\
 & \sum_{n_i=n+j_{sa}}^n \sum_{(i_s+1)}^{(n_i-j_s)} \sum_{n_{is}=n+j_{sa}-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
 & \sum_{(n_{sa}=n_{is}+a+1)}^{+j_{ik}-j^{sa}+1} \sum_{n_s=n-j_i+1}^{j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - n_{ik} - \mathbb{k}_1 - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_i - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

$$\begin{aligned}
& \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_i-j_s+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
& \frac{(n_{ik}+j_{ik}-j_{ik}^{ik}-1)!}{(n_{sa}=n+j^{sa}+1)} \frac{n_{sa}+j^{sa}-j_i}{n_s=n-j_i} \\
& \frac{(n_{sa}-n_{is}-1)!}{(j_s-2)! \cdot (n_i-j_i-1)!} \\
& \frac{(n_{sa}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-k_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-1)!}{(-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
& \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} - \\
& \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!} \cdot$$

$$\frac{(l_s - l - 1)! \cdot (j_s - s - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - \mathbf{n})!}{(D - j_i - \mathbf{n})! \cdot (n - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} \wedge j^{sa} + s - 1 \leq j_i \leq l_s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge j_{sa}^{ik} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^i, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 0 \wedge s = s + \mathbb{k} \wedge$$

$$\exists z: z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - 1)!}{(\mathbf{l}_s - \mathbf{j}_i - \mathbf{l} + 1) \cdot (\mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - l_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{sa}, j_i} = \sum_{k=l}^{l_i+n-D-s) } \sum_{j_{ik}=j_s-l-k-1}^{j_{sa}-l-s} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_i+k} \\ \sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{i-j_s+1) } \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) } \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{(l_i - l + 1)} \sum_{\substack{j_s = l_i + n - k - s + 1 \\ j_{ik} = j_s + j_{sa}^{ik} - j^{sa} = j_{ik} + j_{sa} - j_i}}^{(l_i + j_s - l - s + 1)}$$

$$\sum_{\substack{n_i = n + j_s - j_{sa} + 1 \\ n_{ik} = n + j_{sa}^{ik} - j^{sa} = n_{is} + j_{ik} - \mathbf{k}_1}}^{n} \sum_{\substack{n_{is} = n + \mathbf{k}_1 - 1 \\ n_{ik} = n + \mathbf{k}_2 - j_{ik} + 1}}$$

$$\sum_{a=n-j^{sa}+1}^{n_i + j_{ik} - j^{sa} - \mathbf{k}_2) } \sum_{s=n-j_i+1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_t+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j}^{} \text{X}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{} \text{Y}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j-\mathbb{k}_2)}^{} n_s=n_{sa}+j-\mathbb{k}_2 \text{Z}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s) \cdot (j_i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_s - n - j^{sa} - \mathbb{k} - \mathbb{k}_1 - j_{sa})!} \cdot \text{A}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \text{B}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \text{C}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} \wedge j_{sa}^{ik} + 1 \leq j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge \mathbb{k} = \mathbb{k}_1 > \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{I}, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{} \text{D}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (j_s-n_i-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{} \sum_{j_i=l_{ik}+s-l-j_{sa}^{ik}+2}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{n_s=n-j_i+1}} n_{sa} + j^{sa} - j_i$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_l)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^{s})!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)} \\ \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-\mathbf{l}} \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}. \\$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} + j_{sa} - j_{ik} - 1) \cdot (j_{sa})!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - n - \mathbf{k}_1 - 1) \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{l=1}^{\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{j_{ik}=n+\mathbf{k}}^{n+l_{sa}^{ik}-l} \sum_{(j_s=j_i+j_{sa}-s)}^{(n_i-j_s+1)} \sum_{j_i=l_s+s-l+1}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbf{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbf{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbf{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\infty} \sum_{\substack{() \\ (j_s=j_{ik}-j_{sa}^{ik}+1)}} \sum_{\substack{() \\ (j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}} \sum_{\substack{() \\ (j_i+j_{sa}-s) \leq j_{ik} \leq n+s-D-j_{sa}}} \sum_{\substack{() \\ (n-i_s+1)}}$$

$$\sum_{n_i=n+\mathbb{k}}^{\infty} \sum_{n_i=n+\mathbb{k}-j_s}^{\infty} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{\substack{() \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\infty)} \\ \sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \\ \sum_{n_i=n+1}^n \sum_{(n_i-j_s=j_{ik}-j_{sa}+1)}^{(n_i-j_s)} \sum_{n_s=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-j_{sa}+1} \\ \sum_{(n_{sa}=n-j_i+1)}^{(n_{sa}-j_{sa}+1)} \sum_{n_s=n-j_i+1}^{j^{sa}-j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - j_{sa} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{(l_{sa}-l+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}=n-\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{ik}+j_{ik}-j_{sa}+1)}^{(\)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{sa}-j_i)} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_s - 1)!} \cdot \\ & \frac{(n_i - 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^{sa} - j_{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-i_s}^{\left.\right)} \\
 & \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})} \\
 & \quad \frac{j_s - s)!}{(l_s - l - 1)!} \\
 & \quad \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \\
 & \quad \frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}
 \end{aligned}$$

$$\begin{aligned}
 & D \geq n < n \wedge l_s > D - n + 1 \wedge \\
 & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} \wedge j^{sa} + s - j_{sa}^{ik} \leq j_i \leq \\
 & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge j^{sa} + j_{sa} - s = l_{sa} \wedge
 \end{aligned}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\begin{aligned}
 & j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} \wedge \\
 & s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge
 \end{aligned}$$

$$s > \mathbb{k} \wedge s = s + \mathbb{k} \wedge$$

$$\exists z: z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\left(\right.} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left.\right)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\mathbf{n}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\sum_{j_{ik}=l_s+\mathbf{n}+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\mathbf{n}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - l - \mathbf{l} + 1) \cdot (\mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - l_{ik} - l_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=s_a+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} S_{j_s, j_{ik}, j_{sa}, l_i} &= \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_{sa}-l+1)} \\ &\quad \sum_{j_{ik}=n-D}^{+n+j_{sa}^{ik}-D-j_{sa}} \sum_{(j_s=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ &\quad \sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ &\quad \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \end{aligned}$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{\substack{j_s=j_{ik}+j_{sa}-j_{ik}^{ik}+1 \\ (j_s=j_{ik}+j_{sa}-j_{ik}^{ik}+1)}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_i}^{l_{ik}-l+1} \sum_{j_{ik}+j_{sa}-j_{ik}^{ik}-\mathbf{k}_1}^{(l_{sa}-\mathbf{k}_1)+1} \sum_{j_i=j^{sa}+s-j_{sa}}^{i_{ik}-\mathbf{k}_1}$$

$$\sum_{\substack{n_i=n+\mathbf{k}_1 \\ n_i=n+\mathbf{k}_2-j_{ik}+1}}^{n} \sum_{\substack{-j_s+1 \\ n_{ik}=n+\mathbf{k}_2-j_{ik}+1}}^{-j_s+1} \sum_{\substack{n_{ik}+j_{ik}-j_{sa}-\mathbf{k}_2 \\ n_{sa}+j^{sa}-j_i}}^{n_{ik}-\mathbf{k}_1} \sum_{\substack{n_{sa}=n-j^{sa}+1 \\ n_s=n-j_i+1}}^{n_{sa}+j^{sa}-j_i} \sum_{\substack{n_{ik}+j_{ik}-j_{sa}-\mathbf{k}_2 \\ n_{sa}=n-j^{sa}+1}}^{n_{ik}+j_{ik}-j_{sa}-\mathbf{k}_2} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=n-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(j_s - j_i - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-l+1} \sum_{(j_s=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-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}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}^{(\)} \\ & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j_{sa}^s}^{(\)} \\ & \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - \mathbf{n} - \mathbb{k} - j_{sa})!} \cdot \\ & \frac{1}{(j_{sa}^s - j_s - s)!} \cdot \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \end{aligned}$$

$$\begin{aligned} & D \geq \mathbf{n} < n \wedge l_s > \mathbf{D} - \mathbf{n} + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa}^{ik} - 1 \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge \mathbb{k} = \mathbb{k} > \mathbb{k}_1 \wedge$$

$$\begin{aligned} & j_{sa}^s < j_{sa}^s - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\ & s: \{j_{sa}^s, \dots, \mathbb{I}, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge \end{aligned}$$

$$s > \mathbb{s} \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=n-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{is}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}+j^{sa}-j_i)}} \sum_{n_s=\mathbf{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i - 1)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^s + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^s \leq j_i + j_{sa} - s \wedge j_{sa}^s + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{j_s, j_{ik}, j_{sa}, j_i}^{(l_{sa} + \mathbf{n} - D - j_{sa})} = \sum_{k=\mathbf{l}}^{\mathbf{l}_{sa}-l+1} \sum_{(j_s = l_{ik} + \mathbf{n} - D - j_{sa}^{ik} + 1)}^{(l_{sa} + \mathbf{n} - D - j_{sa})}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(l_{sa} - l + 1)} \sum_{(j_{sa} = l_{sa} + \mathbf{n} - D)}^{(l_{sa} - l + 1)} \sum_{j_i = j_{sa}^s + s - j_{sa}}^{n_i - j_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_{sa} - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} - j_{sa} + 1)}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{is} + j_{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} - j_{ik} - \mathbf{l}_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i - \mathbf{l} - 1)!}{(\mathbf{l}_i - n - \mathbf{k}_i - 1)! \cdot (n - j_i)!}.$$

$$\sum_{k=l+1}^{\infty} \sum_{i=j_{sa}+n-D-j_{sa}+1}^{n-D}$$

$$\sum_{i=j_s+j_{sa}-\mathbf{k}_1-j_{ik}+j_{sa}-j_{sa}^{ik}}^{-l+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbf{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbf{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbf{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l_{ik}-l_{sa}+n-s-j_{sa}+1}^{(\mathbf{l}_{ik}-\mathbf{l}_{sa}+2)} \sum_{i=j^{sa}+s-j_{sa}}^{\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{n-i_{ik}+j_{sa}-j_{ik}}} \sum_{i_l=j^{sa}+s-j_{sa}}^{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ (n_{is}-\mathbb{k}_1) \sum_{n_i=n+\mathbb{k}_1}^{n_{sa}=n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_s=n_{sa}-j_{sa}-\mathbb{k}_1-j_{sa}} \\ (3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)! \\ (3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}-s-j_{sa}}^{(l_{sa}-l+1)} \\
 & \sum_{n_i=n+1}^{n} \sum_{(n_i-j_{sa})}^{(n_i-j_{sa})} \sum_{n_{is}+j_s-n_i-\mathbb{k}_1}^{n_{is}+j_s-n_i-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{sa}=n-j_{sa}+1)} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - j_{sa} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

$$\begin{aligned}
& \sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l-1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_{sa}-l+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}_1-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n-sa+1)}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} n_{sa} - j_i \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{sa} - 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{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l-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}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!} \cdot$$

$$\frac{(l_s - l - 1)! \cdot (j_s - s)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - l - 1)!}{(D - l_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa}^{ik} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \geq l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \mathbb{J}_1, \dots, \mathbb{K}_1, j_{sa}^{ik}, \mathbb{K}_2, \dots, \dots, j_{sa}^s \wedge$$

$$s > 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{K}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_i-l+1}$$

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$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_{is}=n+\mathbb{k}-j_s+1) \\ n_{ik}=n+\mathbb{k}_2-j_{ik}+1}}^{(n_i-j_s+1)} \sum_{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ n_{sa}=n-j^{sa}+1} \\ n_s=n-j_s+1}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \quad \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
 & \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \quad \frac{(n_{sa} - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot \\
 & \quad \frac{(n_s - 1)!}{(n_i + j_i - \mathbf{l}_i + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D + j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
 & \quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
 & \quad \sum_{k=\mathbf{l}}^{\left(\right.} \sum_{\left(j_s=j_{ik}-j_{sa}^{ik}+1\right)}^{\left.\right)} \\
 & \quad \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{\substack{(j^{sa}=j_i+j_{sa}-s) \\ j_i=\mathbf{l}_i+\mathbf{n}-D}}^{\left(\right.} \sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{\left.\right)}^{l_{ik}+s-l-j_{sa}^{ik}+1} \\
 & \quad \sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_{is}=n+\mathbb{k}-j_s+1) \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}}^{(n_i-j_s+1)} \sum_{\substack{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ n_s=n_{sa}+j^{sa}-j_i}}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left.\right)}
 \end{aligned}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j^{sa} - s - j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\)}$$

$$\sum_{j_{ik} = \mathbf{l}_s + \mathbf{n} + j_{sa}^{ik} - D - 1}^{l_s + j_{sa}^{ik} - l} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\)} \sum_{j_i = \mathbf{l}_i + \mathbf{n} - D}^{l_i - l + 1}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(\mathbf{n} - \mathbf{l} - 1)!}{(n_s + \mathbf{n} - \mathbf{l} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(n_s + \mathbf{l}_s - \mathbf{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)} \quad$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_s+s-\mathbf{l}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^n$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$j_{ik}=\sum_{n=D}^{l+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{n}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{l=k}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}-j_{sa}^{ik})} \sum_{(j_i=j_{sa}+s-j_{sa})}$$

$$\sum_{n+\mathbb{k}}^n \sum_{(n_{is}=n+j_s)}^{(-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(j_i=j_{sa}+s-j_{sa})}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(3 \cdot n_{is} + \Delta^{ik} - n_s - n_{sa} - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(n_{is} + 3 \cdot j_s - n_{sa} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$s > n < \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{l=l_{ik}}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\begin{array}{c} l \\ j_s \end{array}\right)} \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(l_i+j_{sa}-s+1)}^{(l_i+j_{sa}-s+1)} \sum_{i_i=j^{sa}+s-j_{sa}}^{l_{ik}-\mathbb{k}_1} \\ \sum_{n_i=n+j_{sa}+1}^n \sum_{n_{is}=n+\mathbb{k}_1-j_{ik}+1}^{-j_s+1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{l_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

g i u d i n

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-l+1} \sum_{(j_s=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}^{sa}}^{(\)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}^{ik}}^{(\)} n_s=n_{sa}+j_{sa}^{sa}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j_{sa}^{sa}}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - l - k - k_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - n - l - k - k_1 - k_2 - j_{sa}^s)!}.$$

$$\frac{1}{(j_{sa}^{sa} - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_{sa} + j_{sa}^{ik} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + s > l_s \wedge l_s + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D > l_i - n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s, j_{sa}^i, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i \} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\infty} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{ik}+j_{ik}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-1)} \sum_{n_{sa}=n-j_i}^{n_{sa}+j_{sa}-j_i} \\ & \sum_{(n_{sa}=n-j_i+1)}^{(n_{sa}=n-j_i-1)} \sum_{n_s=n-j_i}^{n_s-n_{sa}+1} \\ & \frac{(n_s - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_i - 1)!} \cdot \\ & \frac{-n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{-j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ & \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}. \end{aligned}$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\infty} \\ & \end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}.$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n +$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \geq l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D \geq n & I = \mathbb{K} - 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \mathbb{J}_1, \dots, \mathbb{K}_1, j_{sa}^{ik}, \mathbb{K}_2, \dots, \dots, j_{sa}^s \wedge$$

$$s > 4 \wedge s < s + \mathbb{k} \wedge$$

$$\mathbb{K}_z: z = 2 \wedge \mathbb{k} = \mathbb{K}_2 \Rightarrow \mathbb{K}_2 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\begin{aligned}
& \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} \\
& \quad \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - j_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_{sa} - j_i)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \quad \sum_{k=\mathbf{l}}^{(\mathbf{l}_{ik}-\mathbf{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)}^{(\)} \\
& \quad \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\)} \\
& \quad \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}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\)} \\
& \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}
\end{aligned}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j^{sa} - s - j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}}^{(l_s - l + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(l_i + j_{sa} - l - s + 1)} \sum_{(j^{sa} = l_i + n + j_{sa} - D - s)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - \mathbf{l}_s + l + 1) \cdots (l_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - l_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa})! \cdots (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

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$$fz^{n-k} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{i=k+1}^{l_{sa}+s-l-j_{sa}+1} \sum_{n_i=n+k}^{n_{ik}+n-D} \sum_{(j_i=j_{ik}+n-D-s)}^{(j_i=j_{sa}-s)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\infty} \sum_{\substack{() \\ (j_s=j_{ik}-j_{sa}+1)}} \sum_{\substack{() \\ (l_{ik}+s-k-1) \\ (j_{ik}+s-k-1)}} \sum_{\substack{() \\ (n+s-D-j_{sa}) \\ (n_i=n+\mathbb{k}-\mathbb{k}_1-n+\mathbb{k}-j_s) \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}} \sum_{\substack{() \\ (n_{sa}=n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_s=n_{sa}+j^{sa}-j_i)}} \sum_{\substack{() \\ (3 \cdot n_{is}+2 \cdot j_s-n_{sa}-n_s-j^{sa}-j_i-s-2 \cdot \mathbb{k}-\mathbb{k}_1)! \\ (3 \cdot n_{is}+2 \cdot j_s-n_{sa}-n_s-j^{sa}-j_i-\mathbf{n}-2 \cdot \mathbb{k}-\mathbb{k}_1-j_{sa})!)}}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{l_s + j_{sa}^{ik} - l} \sum_{(j_s + j_{sa} - j_{sa}^{ik} + 1)}^{\binom{l}{s}} \\
 &\quad \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_i+j_{sa})}^{\binom{l}{s}} \sum_{i=l_{sa}+n+s-D}^{l_{sa}+s-l-j_{ik}+1} \\
 &\quad \sum_{n_{is}=n+k}^n \sum_{(n_{is}=n-k-j_s+1)}^{(n_{is}-j_s+1)} \sum_{i_{ik}=j_{ik}+1}^{i_{ik}+j_s-j_{ik}-\mathbb{k}_1} \\
 &\quad \sum_{n_{ik}=n-j_{sa}+1}^{n_{sa}} \sum_{(n_{ik}+j_{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i}^{n_{sa}+j^{sa}-j_i} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(n_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -
 \end{aligned}$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-i}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^{\infty} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\infty} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - \mathbf{n} - \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(j_{sa}^s - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa} - 1 \wedge j_s - j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + s \leq l_s \wedge l_s - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D > \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\{s, \mathbb{k}_1, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, l_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}-\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j_{sa}+1)}^{(n_{ik}+j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i}^{n_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot$$

$$\frac{(D - \mathbf{n})!}{(D - j_i - \mathbf{n})! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} +$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa}^{ik} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \geq l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} - 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \mathbb{J}_1, \dots, \mathbb{K}_1, j_{sa}^{ik}, \mathbb{K}_2, \dots, j_{sa}^s \wedge$$

$$s > 4 \wedge s < s + \mathbb{k} \wedge$$

$$\mathbb{K}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\left(\right.} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - j_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{l} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\mathbf{l}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_s+j_{sa}-l)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\mathbf{l}} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\mathbf{l}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j^{sa} - s - j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}-\mathbf{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\mathbf{l}_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_{sa}-\mathbf{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(n_i-j_s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_{sa}-\mathbf{l}+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(\mathbf{n} - \mathbf{l} - 1)!}{(n_s + \mathbf{n} - \mathbf{l} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(n_s + \mathbf{l}_s - \mathbf{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\mathbf{l}} \sum_{(j_s = l_{sa} + \mathbf{n} - D - j_{sa} + 1)}^{(l_{ik} - l - j_{sa}^{ik} + 2)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{n} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{\left(\right.} \sum_{j_i = j^{sa} + s - j_{sa}}^{\left.\right)}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{\left(\right.}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{\left(\right.} \sum_{n_s = n_{sa} + j^{sa} - j_i}^{\left.\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{(l_s-l+1)} \\ \sum_{k=j_s+j_{sa}^{ik}-1}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+s-j_{sa}} \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{l_{sa}+n-D-j_{sa}} \sum_{l_{ik}=l_{sa}+n-D-j_{sa}-k}^{l_{sa}-l-i} \sum_{l_i=l_{sa}+n-D-j_{sa}-k}^{l_{sa}-l-i}$$

$$\sum_{j_{ik}=j_{sa}+n-k-1}^{n} \sum_{(j^{sa}=j_{sa}+j_{ik}-j_{sa})}^{(j^{sa}-j_{sa})} \sum_{l_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(l_{ik}-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(n_{sa}-j_{sa})} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{ik}-j_s+1)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_i - n_s - n_{sa} - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(n_{is} + 3 \cdot j_s - n_{sa} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_l} = & \sum_{k=l}^{(j_{ik}-j_{sa}^{ik})} \sum_{l_s=n-D}^{(j_{ik}-j_{sa}^{ik})} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-s)} \sum_{j_i=l_i+D}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-s-l)} \\
 & \sum_{n_i=j^{sa}+j_{sa}^{ik}-j_{sa}+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i-j_s+1}^{(n_i-j_s+1)-j_{ik}-\mathbb{k}_1} \\
 & \sum_{n_s=n-j_s+1}^{(n_i-j_s+1)-j_{ik}+1} \sum_{n_{sa}=n-j_s+1}^{(n_i-j_s+1)-j_{ik}-\mathbb{k}_1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

gündin

$$\begin{aligned}
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_s + n - D)}^{()} \\
& \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{()} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{()} \sum_{j_i = l_s + s - l + 1}^{l_i - l + 1} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n - \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_2} \\
& \sum_{(n_{ik} + j_{ik} - \mathbb{k}_2)}^{(n_{sa} = n - \mathbb{k}_2 + 1)} \sum_{n_s = n - j_i - 1}^{n_{sa} - j_i} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{ik} - j_s + 1)!} \\
& \frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \sum_{k=l}^{()} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{()} \\
& \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{()} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{()} \sum_{j_i = l_i + \mathbf{n} - D}^{l_s + s - l}
\end{aligned}$$

gündemi

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot$$

$$\frac{(D - \mathbf{n})!}{(D - j_i - \mathbf{n})! \cdot (n - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} \wedge j^{sa} + s - j_{sa}^{ik} \leq j_i \leq j_{il} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge j_{sa}^{ik} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^s, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > \mathbb{k} \wedge s = s + \mathbb{k} \wedge$$

$$\exists z: z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l - j_{sa}^{ik} + 1)!}{(j_s + l - j_{ik} - l + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_s+j_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_i+j_{sa}-l-s+1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - 1)!}{(\mathbf{l}_s - \mathbf{l} + 1 - l + 1)! \cdot (l - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)} \sum_{(j_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{ik}-j_{sa}}^{\left(l_s+j_{sa}-l\right)} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{\left(l_s+j_{sa}-l\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\left(j_i\right)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\left(n_i\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(n_s\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, J_{ik}, j^{sa}, j_i} = \sum_{k=l}^{j_{ik} - j_{sa}^{ik} + 1} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{=l_i + n + \mathbb{k}_1 - D - s}^{l_s + j_{sa}^{ik} - l} \sum_{(j_{sa} = n + \mathbb{k}_2 - j_s + 1)} \sum_{j_i = j^{sa} + s - j_{sa}} \sum_{n_i = n + \mathbb{k}_1 - j_i + 1}^{n_i - j_s + 1} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{ik} + j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{l_s - l + 1} \sum_{(j_s + \mathbf{k} - 1) + \mathbf{n} - D}^{(l_s - l + 1)} \sum_{j_{ik} = l_s + j_{sa}^{ik} - l + 1}^{l_i + j_{sa}^{ik} - l - s + 1} \sum_{j_{sa} = j_{ik} + j_{sa} - j_{ik} - \mathbf{k}_1}^{n - j_s + 1} \sum_{j_i = j^{sa} + s - j_{sa}}^{n - j_{ik} - \mathbf{k}_1}$$

$$\sum_{j_{sa} = n - j^{sa} + 1}^{n_i - n_{is} - \mathbf{k}_1 - 1} \sum_{n_{ik} = n + \mathbf{k}_2 - j_{ik} + 1}^{n - j_s + 1} \sum_{j_{ik} = j^{sa} + s - j_{sa}}^{n_{sa} + j^{sa} - j_i} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{l_s+j_{sa}^{ik}-l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j_s=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-1}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}^{ik}}^{()} n_s=n_{sa}+j_{sa}^{sa}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}+1)}^{()} \sum_{n_s=n_{sa}+j_{sa}^{sa}}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - s - 1 - l_i - l_s - l_{ik} - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - s - l_i - l_s - l_{ik} - l_{sa} - j_{sa}^{sa})!} \cdot$$

$$\frac{1}{(n_{is} + j_{sa}^{sa} - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 2 - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa}^{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge \mathbb{k} > \mathbb{k}_1 \wedge$$

$$j_s - j_{sa}^{sa} > 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{P}, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > \mathbb{P} \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}^{()}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2) \cdot (n_i-n_{is}-j_s+1)!}.$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{sa}+j^{sa}-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=\mathbf{l}}^{(\mathbf{l}_s-\mathbf{l}+1)} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_l-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik} + 1)!}{(j_s + j_{sa} - j_{ik} - l_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}^{()}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - l_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}}^{\left(j_{ik}-j_{sa}^{ik}+1\right)} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{} \sum_{j_i=\mathbf{l}_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{is}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s) \cdot (j_{ik} - j_s - \mathbf{l}_s + 1)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l}_i)!}{(\mathbf{l}_s - n - \mathbf{k}_i) \cdot (n - j_i)!}.$$

$$\sum_{k=l}^{\mathbf{l}_s} \sum_{(j_s = l_s + \mathbf{n} - D)}^{l+1}$$

$$\sum_{=j^{sa} + j_{sa}}^n \sum_{(j_i = j_i + j_{sa} - s)}^{(\)} \sum_{j_i = l_s + s - l + 1}^{l_{sa} + s - l - j_{sa} + 1}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \sum_{l_s=j_s-n+s-D-j_{sa}}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(n_i=j_i+j_{sa}-s)}^{\infty} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=l}^{(l_s - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + n - 1)}^{(j_{ik} - j_{sa}^{ik} + 1)} \\
 & \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(l_s + j_{sa} - l)} \sum_{(j^{sa} = l_s + n - 1)}^{(i := j^{sa} - l_s - j_{sa})} \\
 & \sum_{n_i = n + 1}^n \sum_{(n_i - j_s - 1)}^{(n_i - j_{ik} - j_s + 1)} \sum_{(n_{is} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_{is} + j_s - j_{ik} - 1)} \\
 & \sum_{(n_{sa} = n + \mathbb{k}_1 - 1)}^{(n_{sa} - j_{sa} + 1)} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i + 1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{sa} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(n_{is} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

$$\sum_{k=\mathbf{l}}^{\mathbf{(l_s-l+1)}} \sum_{(j_s=l_s+n-D)}$$

$$\begin{aligned} & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\mathbf{(l_{sa}-l+1)}} \sum_{(j^{sa}=l_s+j_{sa}-\mathbf{l}+1)}^{\mathbf{(l_{sa}-l+1)}} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{(l_s-l+1)}} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\mathbf{(n_i-j_s+1)}} \sum_{n_{ik}=n-\mathbb{k}_1-j_{ik}+1}^{\mathbf{(n_i+j_{sa}-1)}} \sum_{n_s=n-j_i+1}^{\mathbf{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}} \\ & \sum_{(n_{sa}=n-sa+1)}^{\mathbf{(n_{ik}+j_{ik}-\mathbb{k}_2)}} \sum_{n_s=n-j_i+1}^{\mathbf{(n_{sa}-j_i)}} \\ & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - n_{ik} - j_{sa} - 1)!} \cdot \\ & \frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{()}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\mathbf{()}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\mathbf{(l_s+j_{sa}-l)}} \sum_{(j^{sa}=l_{sa}+n-D)}^{\mathbf{(l_s+j_{sa}-l)}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{()}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} n_s=n_{sa}+j^{sa}-i_s$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot \\ \frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} \wedge j^{sa} + s - j_{sa}^{ik} \leq j_i \leq j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge j_{sa}^{ik} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa} - \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > \mathbb{k} \wedge s = s + \mathbb{k} \wedge$$

$$\exists z: z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - l - j_{sa}^{ik} + 1)!}{(j_s + l - j_{ik} - l + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right. \left.\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - \mathbf{l}_s + l + 1) \cdots (l_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{\substack{j_s=j_{ik}+j_{sa}-j_{sa}^{ik} \\ j_s=l_s+n+\mathbb{k}-l}}^{\infty} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^{\infty}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_s, j_{ik}, j_i} = \sum_{k=l}^{n-D-j_{sa}} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{i=n+\mathbb{k}}^{l_{sa}+j_{sa}-l-j_{sa}+1} \sum_{(j^{sa}=l_s+\mathbb{k}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{(l_s - 1)} \sum_{i=j_{sa}+n-s-j_{sa}+1}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{i=j_{ik}+j_{sa}-j_{ik}+1}^{j_{ik}+j_{sa}-1} \sum_{i=j_{sa}+s-j_{sa}}^{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{i=n+j_{sa}+1}^n \sum_{i=n+\mathbb{k}_2-j_{ik}+1}^{-j_s+1} \sum_{i=n+\mathbb{k}_2-j_{ik}-\mathbb{k}_1}^{n_{ik}=n+\mathbb{k}_2-j_{ik}+1} \sum_{i=n_{sa}+j^{sa}-j_i}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{i=n-j_{sa}+1}^{n_{sa}=n-j^{sa}+1} \sum_{i=n-j_i+1}^{n_s=n-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j}^{} \cancel{A}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{} \cancel{Y}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j-\mathbb{k}_2)}^{} \sum_{n_s=n_{sa}+j-s-1}^{} \cancel{Y}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s) \cdot (i_s - s - \mathbf{n} - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_s - n - j^{sa} - \mathbf{n} - \mathbb{k} - \mathbb{k}_1 - j_{sa})!} \cdot \cancel{Y}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \cancel{Y}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot \cancel{Y}$$

$$D \geq \mathbf{n} < n \wedge l_s = D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} \wedge j_{sa}^{ik} + s - j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge \mathcal{N} = \mathbb{k} > \lambda \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{I}, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(\right)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_i=l_{ik}+s+n-D-j_{sa}^{ik}}^{l_s+s-l} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (j_s-n_{is}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
& \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{(l_s-l+1)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(\right)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_i=l_s+s-l+1}^{l_{ik}+s-l-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

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$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\substack{n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik} + 1)!}{(j_s + j_{sa} - j_{ik} - l_{sa} + 1) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_{ik}+s+\mathbf{n}-D-j_{sa}^{ik}}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_s+s-l}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i - 1)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=\mathbf{l}}^{\mathbf{l}_{ik}-j_{sa}^{ik}+1} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{sa}+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j_{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{(l_s+j_{sa}-l)} \sum_{j_i=j_{sa}^{sa}+s-j_{sa}}^{(l_s+j_{sa}-l)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{is}+j_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s) \cdot (j_{ik} - j_s - \mathbf{l}_s + 1)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l}_i)!}{(\mathbf{l}_s - n - \mathbf{k}_1) \cdot (n - j_i)!}.$$

$$\sum_{k=l}^{l+1} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{lk}}^{(l_{ik} + j_{ik} - l - j_{sa}^{ik} + 1)} \sum_{l_s + j_{sa} - l + 1} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbf{k}}^n \sum_{(n_{is} = n + \mathbf{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbf{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbf{k}_1}$$

$$\sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbf{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{\substack{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa} \\ j_{ik}=j^{sa}+j_{sa}^{ik}-n_{sa}}} \sum_{\substack{(l_s+j_{sa})! \\ (j^{sa}+j_{sa}^{ik}-n_{sa}-D-j_{sa})!}} \sum_{\substack{i_i=j^{sa}+s-j_{sa} \\ i_i=j^{sa}+s-j_{sa}}} \sum_{\substack{(n_{is}+j_{sa})! \\ (n_{is}+j_{sa})!}} \sum_{\substack{n_i=n+\mathbb{k} \\ n_i=n+\mathbb{k}-j_s \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_s=n_{sa}+j^{sa}-j_i \\ n_s=n_{sa}+j^{sa}-j_i}} \sum_{\substack{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)! \\ (3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}}$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{l_s + j_{sa}^{ik} - l} \sum_{(j_s = l_s + n - 1)}^{(j_{ik} - j_{sa}^{ik} + 1)} \\
 &\quad \sum_{j_{ik} = l_{ik} + n - D}^{l_s + j_{sa}^{ik} - l} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_s)}^{(\)} \sum_{(j_i = j^{sa} - j_{sa})}^{(n_i - j_s)} \\
 &\quad \sum_{n_i = n + m - 1}^n \sum_{(i+1)}^{(n_i - j_s)} \sum_{n_{is} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik}} \\
 &\quad \sum_{(n_{sa} = n - i + 1)}^{(n_{sa} = n - i + q + 1)} \sum_{n_s = n - j_i + 1}^{j^{sa} - j_i} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - n_i - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - n_{is} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 &\quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

güldin

$$\begin{aligned}
& \sum_{k=l}^{l_s - l + 1} \sum_{(j_s = l_s + n - D)}^{\binom{l}{s}} \\
& \sum_{j_{ik} = l_s + j_{sa}^{ik} - l + 1}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{\binom{l}{s}} \sum_{j_i = j^{sa} + s - j_{sa}}^{\binom{l}{s}} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k} - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n + s - sa + 1)}^{(n_{ik} + j_{ik} - \mathbb{k}_1)} \sum_{n_s = n - j_i}^{n_{sa} + j^{sa} - j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \sum_{k=l}^{l_s + j_{sa}^{ik} - l} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{\binom{l}{s}} \\
& \sum_{j_{ik} = l_{ik} + n - D}^{l_s + j_{sa}^{ik} - l} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{\binom{l}{s}} \sum_{j_i = j^{sa} + s - j_{sa}}
\end{aligned}$$

gündemi

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot$$

$$\frac{(D - \mathbf{n})!}{(D - j_i - \mathbf{n})! \cdot (n - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} - s \wedge j_{sa}^{ik} + s - 1 \leq j_i \leq l_s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge j_{sa}^{ik} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \cdot \{ j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i \} \wedge$$

$$s > 0 \wedge s = s + \mathbb{k} \wedge$$

$$\exists z : z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=\mathbf{n}+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right.} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l - j_{sa}^{ik} + 1)!}{(j_s + l - j_{ik} - l + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - \mathbf{l}_s - l + 1) \cdot (\mathbf{l}_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right.} \sum_{j_i=j^{sa}+s-j_{sa}}^{\left.\right)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\left(\right.}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left.\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{f=1}^{l+1} \sum_{(j_s=l_s+n-D)}^{(l+1)}$$

$$\sum_{i_{ik}=j^{sa}+j_{sa}-j_{sa}}^{n} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^{n} \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot \sum_{\substack{k=l \\ j_{ik}=j^{sa}+j_{sa}^{ik}-1}}^{\mathbf{l}} \sum_{\substack{(j_s=j_{ik}+j_{sa}^{ik}+1) \\ (j_{sa}=j_i+j_{sa}^{ik}-s)}}^{\mathbf{l}} \sum_{\substack{j_i=l_i+n-D \\ (n-i_s+1)}}^{\mathbf{l}} \sum_{\substack{n_i=n+\mathbb{k} \\ n_{ik}=n+\mathbb{k}-j_s \\ n_{sa}=n_{ik}+j_{ik}-\mathbb{k}_1 \\ n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}}^{\mathbf{l}} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i \\ n_s=n_{sa}+j^{sa}-j_i}}^{\mathbf{l}} \sum_{\substack{(3 \cdot n_{is} + 2 \cdot j_s - n_s - n_{sa} - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)! \\ (3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}}^{\mathbf{l}}$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{l_s} \sum_{(l_s + n - D) < l_s + n - D}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(l_i + j_{sa} - l - s + 1)} (j^{sa} = l_i + n - l - s - D - s) j_i = j^{sa} + j_{sa}^i$$

$$\sum_{n+k}^{n_i-j_s+1} (n_{is} - \mathbb{k} - j_s + 1) \dots (n_{ik} + j_{sa} - \mathbb{k}_2) n_{sa} + j^{sa} - j_i$$

$$\sum_{a=n-j^{sa}+1}^{n_i-j_s+1} n_s = n - j_i + 1$$

$$\frac{(n_i - n_{is} - 1)!}{2! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\begin{aligned} & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-i}^{\infty} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}-\mathbb{k}_1}^{n_{is}+j_{ik}-j_{sa}-\mathbb{k}_1} \\ & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}}^{n_{is}+j_{sa}-j_s-\mathbb{k}_1} \\ & \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - i - s - \mathbf{n} - \mathbb{k} - \mathbb{k}_1 - j_{sa})!} \cdot \\ & \frac{1}{(j_{sa}+j_{sa}^s-j_s-s)!} \cdot \\ & \frac{(l_s-l-1)!}{(l_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!} \cdot \\ & \frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} \end{aligned}$$

$$\begin{aligned} & D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge \\ & D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa} - 1 \wedge j_s + j_{sa}^{ik} - j_{sa} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & l_{ik} - j_{sa}^{ik} + s = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D > \mathbf{n} > \mathbf{n} \wedge I = \mathbb{k} > 0 \wedge \\ & j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\ & \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge \end{aligned}$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{l_s-l+1} \sum_{(j_s=j_s+a-D)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{()} \sum_{j_i=j^{sa}+s-j_{sa}} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{ik}+j_{ik}-\mathbb{k}_1-1)}^{(n_{sa}=n-j_{sa}+1)} \sum_{n_s=n-j_i}^{n_{sa}-j_{sa}-1} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \end{aligned}$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{l_s+j_{sa}^{ik}-l} \sum_{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{()} \sum_{j_i=j^{sa}+s-j_{sa}} \\ & \sum_{(j_{ik}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{()}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} n_s=n_{sa}+j^{sa}-i_s$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot \\ \frac{(D - n)!}{(D - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: (\mathbb{K}_1, \dots, \mathbb{K}_1, j_{sa}^{ik}, \mathbb{K}_2, \dots, \dots, j_{sa}^{ik})$$

$$s > 4 \wedge s < s + \mathbb{k} \wedge$$

$$\mathbb{K}_z: z = 2 \wedge \mathbb{k} = 2 \wedge \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{l_{sa}+s-l-j_{sa}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_{sa}+s-l-j_{sa}+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - j_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_{sa} - j_i)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \quad \sum_{k=\mathbf{l}}^{\left(\right.} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left.\right)} \\
& \quad \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right.} \sum_{j_i=\mathbf{l}_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_s+s-\mathbf{l}} \\
& \quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_s+s-\mathbf{l}} \\
& \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left.\right)}
\end{aligned}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j^{sa} - s - j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}}^{(\mathbf{l}_s - \mathbf{l} + 1)} \sum_{(j_s = \mathbf{l}_s + \mathbf{n} - D)}^{(l_s - l + 1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_{is}-j_s+\mathbb{k}_1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - \mathbf{l} + 1 - l + 1)! \cdot (\mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{il}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

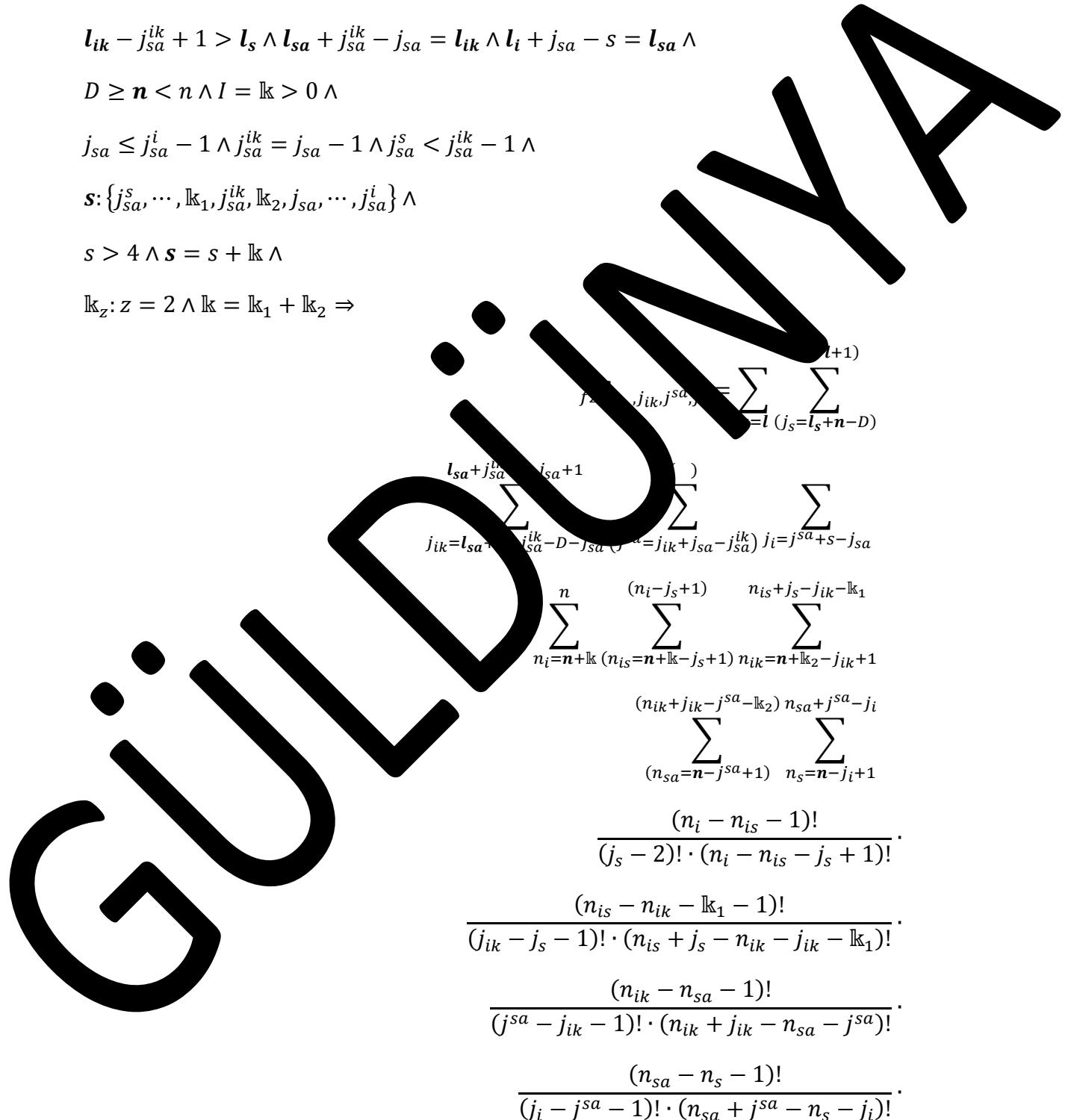
$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$



$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{j_s=l}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_s-j_{sa}^{ik}+s-j_{sa}}$$

$$\sum_{n+1}^n \sum_{(n_{is}=n+1-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} (n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2) \sum_{n_s=n_{sa}+j_{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_i - n_s - j_{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(n_{is} + 3 \cdot j_s - n_i - n_s - j_{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$> n > \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{l_s-l+1} \sum_{(j_s=j_{sa}+n-D)}^{(l_s-l+1)} \\
&\quad \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(i+j_{sa}-s) \leq j_i \leq n+s-D-j_{sa}}^{l_{ik}+s-1} \\
&\quad \sum_{n_i=n+1}^n \sum_{n_{is}=n+\mathbb{k}-j_{sa}+1}^{n-i-k_1} n_{ik}=n+\mathbb{k}_2-j_{ik}+1 \\
&\quad \sum_{n_{sa}=n-j^{sa}+1}^{n-k+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(i - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
&\quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
&\quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -
\end{aligned}$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_{ik}+s+n-D-\frac{1}{2}}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}^{ik}}^{n_i-j_s+1} n_s=n_{sa}+j^{sa}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})}^{\infty} \sum_{n_s=n_{sa}+j^{sa}}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - n - \mathbb{k} - \mathbb{k}_1 - j_{sa}^{ik})!}.$$

$$\frac{1}{(j_{sa}^{ik} - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s - j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + s - l_s \wedge l_s - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D > n > n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\{s, \mathbb{k}, \mathbb{k}_1, \mathbb{k}_2, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}$$

$$\begin{aligned} & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^{\infty} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{ik}+j_{ik}-j_{sa}+1)}^{(n_{sa}=n_{is}+s+1)} \sum_{n_{sa}=j^{sa}-j_i}^{n_s-\mathbf{n}-j_{ik}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_s + 1) \cdot (j_s + 1)!} \cdot \\ & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^{\infty}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{()}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} n_s=n_{sa}+j^{sa}-i_s$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}.$$

$$\frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}.$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n +$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D \geq n & I = \mathbb{K} - 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: (\mathbb{K}_1, \dots, \mathbb{K}_1, j_{sa}^{ik}, \mathbb{K}_2, \dots, \dots, j_{sa}^{ik})$$

$$s > 4 \wedge s < s + \mathbb{k} \wedge$$

$$\mathbb{K}_z: z = 2 \wedge \mathbb{K} = \mathbb{K}_1 \wedge \mathbb{K}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} j_i=j^{sa}+s-j_{sa}$$

güldi

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \quad \sum_{k=\mathbf{l}}^{\mathbf{l}_s+j_{sa}^{ik}-\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right.\left.\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\left(\right.\left.\right)} \\
& \quad \sum_{j_{ik}=\mathbf{l}_{ik}+\mathbf{n}-D}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right.\left.\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\left(\right.\left.\right)} \\
& \quad \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.\left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\right.\left.\right)}
\end{aligned}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i + j_{sa} - s \leq n \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=\mathbf{l}_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{ik}+s-\mathbf{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - l - l + 1) \cdot (\mathbf{l}_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - l_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + \mathbf{l}_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=\mathbf{l}_{ik}+\mathbf{n}-D}^{l_{i+1}} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(l_{sa}-l+1)} \sum_{j_i=\mathbf{l}_{ik}+s-l-j_{sa}^{ik}+2}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - s)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - j_{sa})!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_{sa} - s)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{\mathbf{n} - \mathbf{l}_i \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{l=1}^{\mathbf{l}_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\mathbf{l}_i} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\mathbf{l}_i)}$$

$$\frac{3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(2 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f(z) &= \sum_{i=1}^{l_s+s-l} \sum_{j_i=l_i+n-D}^{n-i+1} \sum_{n_i=n+\mathbb{k}}^{n_i=s-j_s+1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_s+1)} \\ &\quad \sum_{n_{sa}=n-j^{sa}+1}^{(n_i+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}. \end{aligned}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{l_s + j_{sa}^{ik} - l} \left[\sum_{\substack{j_s = j_{ik} \\ j_{sa} = j_{ik} + j_{sa}^{ik} + 1}}^{\left(\begin{array}{c} \\ \end{array} \right)} \right]$$

$$\sum_{\substack{j_{ik} = l_s + n + j_{sa}^{ik} \\ j^{sa} = l_{sa} + n}}^{l_s + j_{sa}^{ik} - l} \sum_{\substack{j_i = l_s + s - l + 1 \\ j_{ik} - \mathbb{k}_1 \\ j_i - j_s + 1 \\ j_{ik} - j^{sa} - \mathbb{k}_2 \\ n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}}$$

$$\sum_{\substack{j_{sa} = n - j^{sa} + 1 \\ n_s = n - j_i + 1}}^{n} \sum_{\substack{n_{sa} + j^{sa} - j_i \\ n_{sa} + j_{ik} - j^{sa} - \mathbb{k}_2 \\ n_{sa} + j_{ik} - j^{sa} - \mathbb{k}_1 \\ n_{sa} + j_{ik} - j^{sa} - \mathbb{k}_1 - 1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{l_i+n-D}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-j_i-\mathbb{k}_1}^{n_i-j_s+1}$$

$$\sum_{(n_{sa}=n_{is}+j_{ik}-j^{sa}+1)}^{\infty} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - s - \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s = D - \mathbf{n} - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$< j^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, l_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}_1-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_1-1)}^{(n_{ik}+j_{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{sa}+j_{sa}-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=n-j_i+1}^{n_{sa}+j^{sa}-1}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i+n_{is}-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{\left(\right.} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left.\right)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\mathbf{l})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left.\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\begin{aligned} & \frac{1}{(\mathbf{n} + j_{sa}^s - j_s - l)^!} \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\ & \frac{(D - l)^!}{(D + j_{ik}) \cdot (\mathbf{n} - l_i)^! \cdot (n - j_i)^!} \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{is} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > j_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} - s \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s > 4 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_2 z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\left(\right.} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left.\right)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + l - n - 1)! \cdot (n_s - j_i)!} \cdot$$

$$\frac{(n - l - 1)!}{(l_s - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + l_s - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{i}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-l}^{j_{sa}^{ik}-l} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(\mathbf{j}_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j^{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i)!(n - l_i)! \cdot (n - j_i)!} =$$

$$j_{ik} = \sum_{j=1}^{i+k-j_{sa}} \sum_{s=1}^{j_{sa}-j_{sa}} \sum_{l=1}^{(l_s+)_s - l} (-1)^{j_{sa} + j_{sa} - D - s} j_i = j_{sa+s-j_{sa}}$$

$$j_{ik} = j_{sa} + j_{sa} - j_{sa} (j^{sa} = n + j_{sa} - D - s) \quad j_i = j^{sa} + s - j_{sa}$$

$$(n_i - s + 1)$$

$$\sum_{n+\mathbb{k}} (n_{is} = n + \mathbb{k} - j_s + 1) \quad n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{1}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot n_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot n_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sq}^s - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$600$$

$$D>\pmb{n} < n$$

$$\pmb{l}_{ik}-j_{sa}^{ik}+1=\pmb{l}_s\wedge \pmb{l}_{sa}+j_{sa}^{ik}-j_{sa}>\pmb{l}_{ik}\wedge \pmb{l}_i+j_{sa}-s>\pmb{l}_{sa}\wedge$$

$$D\geq \pmb{n} < n \wedge I = \Bbbk > 0 \wedge$$

$$j_{sa}\leq j_{sa}^i-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^s < j_{sa}^{ik}-1\wedge$$

$$\pmb{s}:\{j_{sa}^s,\cdots,\Bbbk_1,j_{sa}^{ik},\Bbbk_2,j_{sa},\cdots,j_{sa}^i\}\wedge$$

$$s>4\wedge s=s+\Bbbk\wedge$$

$$\Bbbk_z\!:\!z=2\wedge \Bbbk=\Bbbk_1+\Bbbk_2\Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l \atop (j_s=j_{ik})+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(l_{sa}-)}^{(l_{sa}-)} \sum_{l_i-l+1}^{l_i-l+1} \\ \sum_{n_i=n+\Bbbk \atop (n_{is}=\Bbbk-j_s+1)}^{n} \sum_{n_{ik}=n+\Bbbk_2-j_{ik}+1}^{(n_i-j_{sa})} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1} \\ \sum_{n_s=n-j_i+1}^{(n_i-j_{ik}-j_{sa}-\Bbbk_2)} \sum_{n_{sa}+j_{sa}-j_i}^{n_{sa}+j_{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}.$$

$$\frac{(n_{is}-n_{ik}-\Bbbk_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\Bbbk_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j_{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j_{sa}-1)!\cdot(n_{sa}+j_{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\pmb{n}-1)!\cdot(\pmb{n}-j_i)!}.$$

$$\frac{(\pmb{l}_s-\pmb{l}-1)!}{(\pmb{l}_s-j_s-\pmb{l}+1)!\cdot(j_s-2)!}.$$

$$\frac{(\pmb{l}_{sa}+j_{sa}^{ik}-\pmb{l}_{ik}-j_{sa})!}{(j_{ik}+\pmb{l}_{sa}-j_{sa}-\pmb{l}_{ik})!\cdot(j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{\substack{() \\ (j_s=j_{ik}-j_{sa}^{ik}+ \\ l_{ik}-l+1) \\ (l_{sa}-l+1)}} \sum_{\substack{() \\ (j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}-j_{sa} \\ n_i=n+k_1-k_2-j_{ik}+1) \\ (n_i-j_s+1) \\ (n_{is}+j_s-j_{ik})}} \sum_{\substack{() \\ (n_{sa}=n-j_i+1) \\ (n_s=n-j_i+1)}} \frac{(n_i - n_{is} - 1)!}{(j_s - l_1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_{is} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\begin{aligned} & \sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_{ik}-l+1} \sum_{(j_s=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+s-i}^{\infty} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}^{\infty} \\ & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j_{sa}^s}^{\infty} \\ & \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - \mathbf{n} - \mathbb{k} - j_{sa})!} \cdot \\ & \frac{1}{(j_{sa}^s - j_s - s)!} \cdot \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \end{aligned}$$

$$\begin{aligned} & D \geq \mathbf{n} < n \wedge l_s > \mathbf{D} - \mathbf{n} + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa}^{ik} - 1 \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & D \geq \mathbf{n} < n \wedge \mathbb{k} = \mathbb{k}_1 \wedge \\ & j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\ & s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge \\ & s > j_{sa}^s = s + \mathbb{k} \wedge \\ & \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow \end{aligned}$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_{sa}=n-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{is}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_{ik}-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{\left(\right.} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left.\right)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \quad \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \quad \sum_{k=\mathbf{l}}^{\mathbf{l}_s + j_{sa}^{ik} - \mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\left(\right)} \\
& \quad \sum_{j_{ik}=\mathbf{l}_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\left(\right)} \\
& \quad \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(n + j_{sa}^s - j_s - l)^!} \cdot \frac{(l_s - l - s)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l)^!}{(D + j_{ik} - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{is} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > j_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} - s \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s > 4 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_2 \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+\mathbf{n}-D-s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - \mathbf{n} - 1)!}{(n_s + \mathbf{n} - l - 1)! \cdot (n_s - j_i)!}.$$

$$\frac{(\mathbf{n} - l - 1)!}{(l_s - l - 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\mathbf{n})} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s, j_{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{i_k=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_{sa}-1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{(j_s = l_i + n - D - s)}^{(l_s - 1)} \dots$$

$$\sum_{(j_{ik} = j_s + n - l + 1)}^{(l_{sa} - l + 1)} \dots$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = n_i - \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \dots$$

$$\sum_{(n_{sa} = \mathbf{n} - j^{sa} + 1)}^{n + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{l}_s - \mathbf{l} + 1} \sum_{(j_s = l_i + \mathbf{n} - D - s + 1)}^{(l_s - l + 1)} \\ \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{(j^{sa} = j_{ik} + j_{sa} - s + 1)} \sum_{(j_i = j^{sa} - j_{sa} - s + 1)}^{(n_i - j_s + 1)} \\ \sum_{n_i = \mathbf{n} + \mathbb{k} - (j_s - l_i + 1)}^n \sum_{n_{ik} = j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s + 1)} \\ \sum_{(n_{sa} - j_{sa} + j_{ik} - j^{sa} - s + 1)}^{(n_s = n_{sa} + j^{sa} - j_i)} \sum_{n_s = n_{sa} + j^{sa} - j_i}^{(n_s - j_{sa} - s + 1)} \\ \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_i - n_s - j^{sa} + s - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_i - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{l} - l_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \cdot j_s - j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^s \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_s-1}^{n_{is}+j_s-\mathbb{k}_1}$$

$$\sum_{j_s=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j_s-\mathbb{k}_2)} \sum_{j_i=j_i+1}^{n_{sa}+j^{sa}-j_t}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_i - \mathbb{k}_1 - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{sa} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_i+n-p}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}^{ik}+1}^{n_i-j_s+1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}+1}^{n_i-j_s+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}+1)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - s - l_i - l_{ik} - l_{sa})!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - l_{ik} - l_{sa} - s - l - j_{sa}^{sa})!}.$$

$$\frac{1}{(j_{sa}^{sa} + j_{sa}^{ik} - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - l - 1) \cdot (j_s - l + 1) \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i) \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - l_i - l_{ik} - l_{sa} \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + s - l_s \wedge l_{ik} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D > l_i - \mathbf{n} \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \cdot \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}_1-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}+1)} \sum_{n_{sa}=l_{sa}+n-sa-j_i}^{n_{is}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_s + 1)!} \cdot$$

$$\frac{-n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{-j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_l=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-s}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-\mathbb{k}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} - n_{sa} - j_s - s)!}$$

$$\frac{(l_s)}{(l_s - l - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i)}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + s \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq j_s \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} - j_i + j_{sa} - s \wedge j_{ik} - s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = s \wedge l_{sa} + j_{sa}^{ik} - j_s = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 2 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \mathbb{k}_1, j_{sa}^i, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = \mathbb{k} + \mathbb{k} \wedge$$

$$\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{\left(l_{sa}-l+1\right)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_i-l+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{\left(n_i-j_s+1\right)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{\left(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}} \\
& \frac{\left(n_i-1\right)!}{\left(j_s-2\right) \cdot\left(n_i-n_{is}-1\right) !} \\
& \frac{\left(n_{is}-n_{ik}-\mathbb{k}_1-1\right)!}{\left(j_{ik}-j_s-1\right) \cdot\left(j_s-n_i-j_{ik}-\mathbb{k}_1\right) !} \\
& \frac{\left(n_{im}-n_{sa}-1\right)!}{\left(j^{sa}-j_{ik}-1\right) ! \cdot\left(n_{sa}+j_{ik}-n_{sa}-j^{sa}\right) !} \\
& \frac{\left(n_{sa}-n_s-1\right)!}{\left(j_i-j^{sa}-1\right) \cdot\left(n_{sa}+j^{sa}-n_s-j_i\right) !} \\
& \frac{\left(n_s-1\right)!}{\left(n_s+j_i-\mathbf{n}-1\right) ! \cdot\left(\mathbf{n}-j_i\right) !} \\
& \frac{\left(l_s-l-1\right)!}{\left(l_s-j_s-\mathbf{l}+1\right) ! \cdot\left(j_s-2\right) !} \\
& \frac{\left(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa}\right)!}{\left(j_{ik}+l_{sa}-j^{sa}-l_{ik}\right) ! \cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right) !} \\
& \frac{\left(l_i+j_{sa}-l_{sa}-s\right)!}{\left(j^{sa}+l_i-j_i-l_{sa}\right) ! \cdot\left(j_i+j_{sa}-j^{sa}-s\right) !} \\
& \frac{\left(D-l_i\right)!}{\left(D+j_i-\mathbf{n}-l_i\right) ! \cdot\left(\mathbf{n}-j_i\right) !}- \\
& \sum_{k=\mathbf{l}}^{\left(l_{ik}-l-j_{sa}^{ik}+2\right)} \sum_{\left(j_s=l_i+\mathbf{n}-D-s+1\right)}^{\left(\right)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\left(\right)}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot$$

$$\frac{(D - \mathbf{n})!}{(D - j_i - \mathbf{n})! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + s - 1 \leq j_i \leq \dots \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa}^{ik} = l_{ik} \wedge j_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^i, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > \dots \wedge s = s + \mathbb{k} \wedge$$

$$\exists z : z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + \mathbf{n} - D)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{l_s+s-l} \sum_{j_i=l_i+\mathbf{n}-D}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l - j_{sa}^{ik} + 1)!}{(j_s + l - j_{ik} - l + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathfrak{l}_t + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(\mathbf{n} - \mathbf{n} - 1)!}{(n_s + \mathbf{n} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{n} - l - 1)!}{(l_i - l_s - l - 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - l_s - l_s)! \cdot (l_{ik} - j_s - j_{sa} + 1)!}.$$

$$\frac{(l_i - l_{sa} - l_{sa} - s)!}{(l_i + l_{sa} - l_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_i+\mathbf{n}-D}^{l_s+s-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_i-j_s+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{i,k,l,s,a,j_{sa},j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}$$

$$\sum_{i=k+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_{sa} - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l}_i)!}{(\mathbf{l}_s - n - \mathbf{k}_1) \cdot (n - j_i)!}.$$

$$\sum_{k=l}^{(l_s - j_{sa}-l)} \sum_{(j_s = l_s + n - D)}^{(j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik} = j_{sa} + s + j_{sa}^{ik} - j_{sa}}^{(l_s - j_{sa}-l)} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=l}^{(\mathbf{l}_{ik}-l+1)} (j_s = l_s + n_{ik} - k)$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}-j_{ik}}^{(n_i-j_s+1)} (j^{sa} = n_{sa} + j_{sa} - l + 1) j_{ik} = n_{ik} - j_{sa}$$

$$\sum_{n_i=\mathbf{n}+\mathbf{k}}^n \sum_{(n_{is}=n_i-\mathbf{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbf{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1} \\ \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{\substack{() \\ (j_s=j_{ik}-j_{sa}^{ik}+ \\ l_s+j_{sa}^{ik}-l_{sa})}}^{\infty} \sum_{\substack{() \\ (j^{sa}=l_i+\mathbf{n}+j_{sa}-D-j_i-j_{sa})}}^{\infty} \sum_{\substack{() \\ (n_i=\mathbf{n}+\mathbb{k}(n_{ik}-j_{ik}+1) \\ n_{ik}=n_s+j_s-j_{ik}-\mathbb{k}_1)}}^{\infty} \sum_{\substack{() \\ (n_{sa}=n_s+j_{sa}-j_i \\ n_s=n_{sa}+j^{sa}-j_i)}}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_i - n_s - j^{sa} + s - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_i - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} > \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_{ik}-\mathbb{k}_1}^{n_{is}+j_{ik}-\mathbb{k}_1+1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2+1)} \sum_{n_{sa}+j_{sa}-j_i}^{n_{sa}+j_{sa}-j_i+1}$$

$$\frac{(n_i - n_{is})}{(j_s - 2) \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_i - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2) \cdot (n_i-n_{is}-j_s+1)!}.$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{sa}+j_{ik}-n_{sa}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - 1)!}{(j_s - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_s - 1)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \quad \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \quad \sum_{k=\mathbf{l}}^{\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)} \\
& \quad \sum_{j_{ik}=\mathbf{l}_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left.\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\begin{aligned} & \frac{1}{(\mathbf{n} + j_{sa}^s - j_s - l)^!} \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\ & \frac{(D - l)^!}{(D + j_{ik}) \cdot (\mathbf{n} - l_i)^! \cdot (n - j_i)^!} \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > j_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right.} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)} \sum_{n_{sa}+j^{sa}-j_i}^{\left(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n_s - j_i)!} \cdot$$

$$\frac{(n - l - 1)!}{(l_s - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - l_s - l_s)! \cdot (l_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(l_i - l_{sa} - l_{sa} - s)!}{(l_i + l_{sa} - l_{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{l} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - \mathbf{l}_s + 1)!} \cdot$$

$$\frac{(\mathbf{l}_s + j_{sa} - l_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{(l_s-l+1)} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^n \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{j_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{f=1}^{n-k} \sum_{(j_s=l_s+n-D)}^{(l+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}-j_{sa}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-l+1} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{j_{ik}=j_s+j_{sa}-j_{sa}^{ik} \\ j_{ik}=j_i+j_{sa}-s}} \sum_{\substack{j_a=j_i+j_{sa}-s \\ j_a=j_s+j^{sa}-j_i}} \sum_{\substack{j_t=j_i+n-D \\ j_t=j_s+j^{sa}-j_i}}$$

$$\sum_{\substack{n+\mathbb{k} \\ (n_{is}=n+j_s-j_{sa}^{ik})}}^n \sum_{\substack{-j_s+1) \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}} \sum_{\substack{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_s=n_{sa}+j^{sa}-j_i}}$$

$$\frac{(3 \cdot n_{is} + \Delta^{ik} - n_s - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(n_{is} + 3 \cdot j_s - n_s - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D > \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_l} = \sum_{k=l}^{j_{ik}} \sum_{l_s=n-D}^{(j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_i=l_i+n-D}^{j^{sa}+j_{sa}-s-l} j_i = l_i + n - j_i$$

$$\sum_{n_i=n+j_{sa}+1}^{(n_i-j_s+1)} \sum_{n_s=n-j_i+1}^{(n_s+j_s-j_{ik}-\mathbb{k}_1)} n_{ik} = j_{ik} + 1$$

$$(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) n_{sa} + j^{sa} - j_i$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{l_s=l_s+s-l+1}^{l_i-l+1} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+i_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{ik}-\mathbb{k}_1+1}^{n_{is}+\mathbb{k}_1} \\ & \sum_{(n_{sa}=n_{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=n-j_i+1}^{n_{sa}+j^{sa}} \\ & \frac{(n_{is}-\mathbb{k}_1-1)!}{(j_{ik}-\mathbb{k}_1-1)! \cdot (n_i+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik}-n_{sa}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\ & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \end{aligned}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\begin{aligned}
& \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_i+n-D}^{l_s+s-l} \\
& \sum_{n_i=n+k}^{\infty} \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} n_{ik}=n_{is}+j_{ik}-j_{sa} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{\infty} n_s=n_{sa}+j_{sa} \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - k - k_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - n - k - k_1 - j_{sa})!} \\
& \frac{1}{(l_s - l + 1) \cdot (j_s - 2)!} \\
& \frac{(l_s - l - 1)!}{(D - l_i)!} \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
& D \geq n < n \wedge l_s > D - n + 1 \wedge \\
& 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
& j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa}^{ik} - 1 \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
& D \geq n < n \wedge k > k_1 \wedge \\
& j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\
& s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge \\
& s > j_{sa}^s = s + k \wedge \\
& k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow
\end{aligned}$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}-1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i+n_{is}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - 1)!}{(j_s - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \quad \sum_{k=\mathbf{l}}^{\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\mathbf{l}} \\
& \quad \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{l_s+j_{sa}^{ik}-l_s} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left.\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\begin{aligned} & \frac{1}{(\mathbf{n} + j_{sa}^s - j_s - l)^!} \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\ & \frac{(D - l)^!}{(D + j_{ik}) \cdot (\mathbf{n} - l_i)^! \cdot (n - j_i)^!} \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = j_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(j_s)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_i+\mathbf{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - \mathbf{n} - 1)!}{(n_s + \mathbf{n} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{n} - l - 1)!}{(l_s - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s - l_s) \cdot (l_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik}) \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - \mathbf{l}_s - l + 1) \cdot (\mathbf{l}_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(j_s + j_{sa} - l_{ik} - j_{ik} + j_{sa} - j_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{ik} + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + \mathbf{l}_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{l_s - l + 1} \sum_{(j_s = l_s + \mathbf{n} - D)}$$

$$\sum_{j_{ik} = l_s + j_{sa}^{ik} - l + 1}^{l+1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(l_i + j_{sa} - l - s + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{ik})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{j_s = j_{ik} - j_{sa}^{ik} + 1}} \sum_{\substack{(j_s - l_s + j_{sa}^{ik} - l) \\ (j_{ik} = e^{sa} + j_{sa}^{ik} - D - s) \\ (j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}}$$

$$\sum_{\substack{n_i = \mathbf{n} + \mathbb{k} \\ (n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}} \sum_{\substack{(n_i - j_s + 1) \\ (n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1)}} \sum_{\substack{j_i = j^{sa} + s - j_{sa}}} \sum_{\substack{(n_i - j_s + 1) \\ (n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1)}}$$

$$\sum_{\substack{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_s = n_{sa} + j^{sa} - j_i)}} \sum_{\substack{(n_s - j_s + 1) \\ (n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}}$$

$$\frac{(-3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(-n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{\substack{j_{ik}+n-D \leq j_{sa} \leq j_i \\ j_{sa} \leq j_{sa}^{ik} - 1}} \sum_{\substack{i=k+1 \\ i \neq l \\ l \neq k}} \sum_{\substack{(l_i+n-D-1) \\ \leq l \leq l_s+n-D}}$$

$$\sum_{=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}+s-n+j_{sa}-D-s)}^{(l_i+j_{sa}^{ik}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{\substack{n_i=n+\mathbb{k} \\ n_{is}=n+\mathbb{k}-j_s+1}} \sum_{\substack{(n_i-j_i+1) \\ n_{is}+j_s-j_{ik}-\mathbb{k}_1}} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)} \sum_{n_s=n-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{\substack{i_1 = l_i + n - s + 1 \\ i_2 = l_i + n - s + 1}}^{\substack{-l+1 \\ -l+1}} \sum_{\substack{j_{ik} = j_s + j_{sa}^{ik} \\ i_{ik} + j_{sa} - j_s = i_i = j^{sa} + s - j_{sa}}}^{\substack{l_{ik}-l+1 \\ (l_i + j_s) - l - s + 1 \\ i_i = j^{sa} + s - j_{sa}}} \sum_{\substack{n_i = n + \mathbb{k}_1 - j_s + 1 \\ n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}}^{\substack{-j_s + 1 \\ -j_{ik} + \mathbb{k}_1}}$$

$$\sum_{\substack{s_a = n - j^{sa} + 1 \\ n_s = n - j_i + 1}}^{\substack{n \\ n - j_s + 1}} \sum_{\substack{n_{sa} + j^{sa} - j_i \\ n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}}^{\substack{n_{sa} + j^{sa} - j_i \\ n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}}.$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\begin{aligned}
& \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=l_i+n-D-s+1}^{\infty} \\
& \sum_{j_{ik}=j_s+j_{sa}-1}^{\infty} \left(j^{sa} = j_{ik} + j_{sa} - j_s, \dots, j^{sa} = j_{ik} + j_{sa} - j_{sa} \right) \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} n_{ik} = n_i - j_s - j_{ik} - \mathbb{k}_1 \\
& \sum_{(n_{sa} = j_{ik} - j^{sa})}^{\infty} n_s = n_{sa} + j^{sa} - j_i \\
& \frac{n_s - n_s - j^{sa} - \dots - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(n - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.
\end{aligned}$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n - 2 \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik}^{sa} + j_{sa}^{ik} - 1 \quad j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} \leq j_{sa} \leq j_{ca} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + s > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

ysa — *ysa* *ysa* *ysa* *ysa* *ysa*

3. (Jsa_1 , ..., Jsa_n , Jsa_{n+1})

$S > T \wedge S = S + \text{Max}$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1, n_{sa}=n+\mathbb{k}-j_{sa}+1)}^{(n_i-j_s+1)} \sum_{j_{ik}=l_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1} \sum_{j_{sa}=j_{sa}+1}^{n_{sa}+j_{ik}-\mathbb{k}_2}$$

$$\sum_{n_{sa}=n-j_{sa}+1}^{n-j^{sa}+1} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - l_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-\mathbf{l}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_i=l_s+s-\mathbf{l}+1}^{l_{sa}+s-\mathbf{l}-j_{sa}+1}$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{lk}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_s+s-\mathbf{l}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s)!}{(l_s - l - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot \frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}.$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} - j_{sa}^{sa} + s - j_{sa}^{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge j_{sa}^{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa}^{sa} - 1 \wedge j_{sa}^s < j_{sa}^{sa} - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{sa}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > \mathbb{k} \wedge s = s + \mathbb{k} \wedge$$

$$\exists z: z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}+j^{sa}-j_i)}} \sum_{n_s=\mathbf{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_i - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{sa} - j_{ik} - l_{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(\mathbf{l}_s-l+1)} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}+j^{sa}-j_i)}} \sum_{n_s=\mathbf{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(\mathbf{n} - \mathbf{l} - 1)!}{(n_s + \mathbf{l} - \mathbf{n} - \mathbf{l} - 1)! \cdot (j_s - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_{sa} - j_{sa}^i + 1)!}{(j_s + \mathbf{l}_{ik} - \mathbf{l}_{sa} - l_s) \cdot (l_{ik} - j_s - j_{sa}^i + 1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^i - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik}) \cdot (j^{sa} + j_{sa}^i - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(\mathbf{l}_s+j_{sa}-\mathbf{l})} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_i-j_s+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{i,k,j,s,a,j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}$$

$$\sum_{i_k=l_{ik}+n-D}^{l_{sa}+n-\mathbf{l}+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{j^{sa}-D-j_{sa}-1} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_{sa}-l+1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{ik} + 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa} + 1)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(n - \mathbf{l}_i) \cdot (\mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{l=1}^{\mathbf{l}_s} \sum_{(j_s = l_s + \mathbf{n} - D)}^{(n - j_{sa}^{ik} + 1)}$$

$$\sum_{l_s + j_{sa}^{ik} - l}^{l_s + j_{sa}^{ik} - l}$$

$$\sum_{(j_{ik} = l_s + j_{sa}^{ik} - D - j_{sa})}^{(n - l + 1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{\substack{j_{ik} = l_i + 1 \\ j_{sa} = l_s + j_{sa}^{ik} - l + 1}}^{\mathbf{l}_{ik} - l + 1} \sum_{\substack{j^{sa} = l_s + j_{sa} - j_{sa}^{ik} \\ j_i = j^{sa} + s - j_{sa}}}^{(\mathbf{l}_{sa} - 1)} \sum_{\substack{n_i = \mathbf{n} + \mathbb{k} \\ n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1}}^{n_{is} + s + 1} \sum_{\substack{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1 \\ n_{sa} = \mathbf{n} - j^{sa} + 1}}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{\substack{(n_{sa} = \mathbf{n} - j^{sa} + 1) \\ n_s = \mathbf{n} - j_i + 1}}^{(n_{sa} + j^{sa} - j_i)} \sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{sa} + j^{sa} - j_i)}}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{\substack{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_s \\ j_{ik} \leq j_s + j_{sa}^{ik} - 1}}^{\substack{l_s + j_{sa}^{ik} - l \\ j_{ik} = j_s + j_{sa}^{ik} - 1}} \sum_{\substack{n_i=n+\mathbb{k}(n_{is}+n-\mathbb{k}-j_s+\mathbb{k}_1) \\ n_i \leq n_{is}+j_s-j_{ik}-\mathbb{k}_1}}^{\substack{(n_{is}+\mathbb{k}-1) \\ n_i = n_{is}+j_s-j_{ik}-\mathbb{k}_1}} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i \\ n_s \leq n_{sa}+j^{sa}-j_{ik}-\mathbb{k}_2}}^{\substack{(n_{sa}+\mathbb{k}-1) \\ n_s = n_{sa}+j^{sa}-j_i}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D < n < \mathbf{n} \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{l_{sa}+n-D-j_{sa}} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \\
&\quad \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}-s-j_{sa}} \\
&\quad \sum_{n_i=n+j_{sa}+j_{ik}+1}^n \sum_{(n_i=j_{sa}+j_{ik}+1)}^{(n_i-n_{sa}-1)} \sum_{n_{is}=n+k_2-j_{ik}+1}^{n_{is}+j_{sa}-j_{ik}-\mathbb{k}_1} \\
&\quad \sum_{(n_{sa}=n_{is}+j_{sa}+1)}^{(n_{sa}-n_{is}-1)} \sum_{n_s=n-j_i+1}^{n_s+j^{sa}-j_i} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - l_s)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - l_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
&\quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
&\quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
\end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=l}^{l_s-l-1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l-1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_i} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}_1-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-sa+1)}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{n_s=n-j_i}^{n_{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
 & \sum_{k=l}^{l_s-l-1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l-1)}
 \end{aligned}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-\mathbb{k}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_2 - (j_{sa}^s)!)}$$

$$\frac{1}{(\mathbf{n} - l_s - j_s - s)!}$$

$$\frac{(l_s - l + 1)! \cdot (j_s - 2)!}{(l_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + s \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq \mathbb{k} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} - j_i + j_{sa} - s \wedge j_{ik} - s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > \mathbb{k} \wedge l_{sa} + j_{sa}^{ik} - j_s = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \mathbb{k}_1, j_{sa}^i, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = \mathbb{k} + \mathbb{k} \wedge$$

$$\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=\bar{l}_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_l=l_i+\mathbf{n}-D}^{l_i-l+1}$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{lk}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i+n_{is}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{is}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=l}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(\right)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_l=l_i+\mathbf{n}-D}^{l_s+s-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s)!}{(l_s - l - 1)! \cdot (j_s - l)!} \cdot \\ \frac{(D - l)!}{(D - j_i - \mathbf{n} - 1)! \cdot (n - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: (\mathbb{J}_1, \dots, \mathbb{K}_1, j_{sa}^{ik}, \mathbb{K}_2, \dots, \dots, j_{sa}^s) \wedge$$

$$s > 4 \wedge s < s + \mathbb{k} \wedge$$

$$\mathbb{K}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - 1)!}{(j_s - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \quad \sum_{k=\mathbf{l}}^{\mathbf{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\mathbf{l}} \\
& \quad \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(\mathbf{l}_s+j_{sa}-\mathbf{l})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(n + j_{sa}^s - j_s - l)^!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l + 1)^!}{(D + j_{ik} - n - l_i)^! \cdot (n - j_i)^!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - 2 \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - l_{ik} \wedge l_i - j_{sa} - s = j_i \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^i < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \neq 4 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_{z+1} = 2 \wedge \mathbb{k} = \mathbb{k}_1 - \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{n_s=\mathbf{n}-j_i+1}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik} + 1)!}{(j_s + l_{sa} - j_{ik} - l_{sa} + 1) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right. \left.\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right. \left.\right)} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_s+s-l}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right. \left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\right. \left.\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j^{sa} - s - j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}}^{(l_s-l+1)} \sum_{(j_s=\mathbf{l}_s+n-D)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_i-s+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - 1)!}{(\mathbf{l}_s - \mathbf{l} + 1 - l + 1)! \cdot (l - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(j_{ik} + \mathbf{j}_{sa} - j^{sa} - l_{ik})! \cdot (j_{ik} + j^{sa} - l_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - l_{ik})! \cdot (j_{ik} + j^{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(\mathbf{l}_s+j_{sa}-\mathbf{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s < j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{a+j_{sa}^{ik}-j_i} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_s+s-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{sa} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa})!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - \mathbf{l}_s)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(j^{sa} + \mathbf{l}_i - n - \mathbf{l}_i) - (n - j_i)!}.$$

$$\sum_{l=k}^{l_{ik}-l+1} \sum_{(j_s=l_s+n-D)}^{l_{sa}-l+1} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - \mathbf{l}_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D-1)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{\substack{i_{ik}=j^{sa}+j_{sa}^{ik}-j_{ik}-j^{sa} \\ i_{ik}=j_i+j_{sa}-s}} \sum_{\substack{\kappa=j_{ik}-j_{sa}^{ik}+1 \\ \kappa=j_i-j_{sa}+s}} \sum_{j_i=l_i+\mathbf{n}-D}^{l_s+s-l}$$

$$\sum_{\substack{i_{ik}=n+\mathbb{k} \\ i_{ik}=n+\mathbb{k}-j_s+1}} \sum_{\substack{(n_i-\mathbb{k}-1) \\ (n_i-\mathbb{k}-1)}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_s+s-l}$$

$$\sum_{\substack{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n_{is}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}+1)} \sum_{n=j_s-l+1}^{l_i-l+1} \\ \sum_{n_i=n+\mathbb{k}}^{j_{sa}+j_{sa}^{ik}-i} \sum_{n_{is}=l_{sa}+\mathbb{k}-j_s+1}^{(l_i+n+j_{sa}-i)-1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{n_{sa}=n-j_{sa}+1}^{(n_i-j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}. \\ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}. \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!}. \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}. \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}. \\ \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}. \\ \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

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$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{(l_s+j_{sa}-\mathbf{l}_s)-1} \sum_{(j_s=j^{sa}+s-j_{sa})}^{(j_k-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(l_s+j_{sa}-D)}^{(l_s+j_{sa}-l)}$$

$$\sum_{i_i=j^{sa}+s-j_{sa}}^{i_{ik}-\mathbb{k}_1}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(j_{is}=n+\mathbb{k}_2-\mathbb{k}_1-1)}^{(j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{sa}+j^{sa}-j_i}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - j_i - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{j_{sa}=l_s+j_{sa}-l+1}^{(l_s-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{n-D}$$

$$\sum_{j_{ik}=l_{ik}+n-\mathbb{k}_1}^{l_{ik}-l+1} \sum_{i_{sa}=l_s+j_{sa}-l+1}^{(l_s-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{n-D}$$

$$\sum_{n_i=n-\mathbb{k}_1}^n \sum_{n_{is}=n+\mathbb{k}_1-(l-1)}^{n_i-j_{sa}} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{a=n-j^{sa}+1}^{n-i-k} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_{sa}=j^{sa}-j_i}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{\substack{() \\ (j_s=j_{ik}-j_{sa}^{ik}+1)}}^{\infty} \sum_{\substack{(l_s+j_{sa}-l) \\ (j^{sa}=l_i+\mathbf{n}+j_{sa}-D-j_i-j_{sa})}}^{\infty} \sum_{\substack{(n_i-j_s+1) \\ (n_i=k-(l_s+j_{sa}-l)+1)}}^{\infty} \sum_{\substack{(n_{ik}=n_s+j_s-j_{ik}-\mathbb{k}_1) \\ (n_{sa}=n_s+j_{sa}-j_{ik}-j^{sa})}}^{\infty} \sum_{\substack{(n_s=n_{sa}+j^{sa}-j_i) \\ (n_s=j_{sa}+1)}}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_i - n_s - j^{sa} + s - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_i - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{l} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1, n_{sa}=n+\mathbb{k}-j_{sa}+1)}^{(n_i-j_s+1)} \sum_{j_{ik}=l_{ik}+n-D}^{n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1} \Delta$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \leq n_{sa}+j_{sa}-j_i}^{n_{sa}+j_{sa}-j_i} \sum_{n_s=n-j_i+1}^{n-j^{sa}+1} \Delta$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_i - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(n_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-1}^{l_i-l+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \frac{(n_{ik}+j_{ik}-j_{ik}^{ik}-1)!}{(n_{sa}=n-j_{sa}+1)!} \frac{n_{sa}+j_{sa}-j_i}{n_s=n-j_i} \\
& \frac{(n_{sa}-n_{is}-1)!}{(j_s-2)! \cdot (n_i-j_s+1)!} \\
& \frac{(n_{ik}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-1)!}{(-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!} \\
& \frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
& \frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
& \frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
& \frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=l}^{l_{ik}-l+1} \sum_{j_s=l_s+n-D}^{l_s-l+1} \sum_{j_i=j^{sa}+s-j}^{l_i-l+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
& \sum_{(n_{sa}=n-sa+1)}^{(n_{ik}+j_{ik}-k_1)} \sum_{n_s=n-j_i}^{n_{sa}-j^{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_s - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -
\end{aligned}$$

$$\sum_{k=l}^{l_s+j_{sa}^{ik}-l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j_s=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-1}^{(\)}$$

$$\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}=n_{is}+j_{ik}-j_{sa}^{ik}}^{(\)} n_s=n_{sa}+j_{sa}^{ik}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})}^{(\)} \sum_{n_s=n_{sa}+j_{sa}^{ik}}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - s - l_i - l_s - l_{ik} - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - s - l_i - l_s - l_{ik} - l_{sa} - j_{sa}^{ik})!} \cdot$$

$$\frac{1}{(j_{sa}^{ik} + j_{sa} - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > \mathbf{n} - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n, \mathbb{k} = \mathbb{k} > \mathbb{k} \wedge$$

$$j_s - j_{sa}^{ik} > 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{P}, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > \mathbb{P} \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+\mathbf{n}-D-s)} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(\)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_l=l_i+n-D}^{l_i-l+1} \\
 & \sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{lk}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_{i+1}}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i - l_{ik} - 1)!}{(j_s - 2) \cdot (n_i - n_{is} - 1)!} \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1) \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\
 & \frac{(n_{lk} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{lk} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1) \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_{sa} - l + 1)}
 \end{aligned}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_l=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}+1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (j_s-n_{is}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (j^{sa}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-\mathbb{k}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_2 - (j_{sa}^s)!)}$$

$$\frac{1}{(\mathbf{n} - l_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - l + 1)! \cdot (j_s - 2)!}{(l_s - j_i - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + s \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq j_i \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j_{sa} - s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_{sa} \wedge l_{sa} + j_{sa}^{ik} - j_s > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \mathbb{k}_1, j_{sa}^{\mathbb{k}_1}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = \mathbb{k} + \mathbb{k} \wedge$$

$$\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=\bar{l}_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_{sa}-l+1)} \sum_{j_l=l_i+\mathbf{n}-D}^{l_i-l+1}$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{lk}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j=n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{is}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(\mathbf{D}-\mathbf{l}_i)!}{(\mathbf{D}+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{(\mathbf{l}_s-\mathbf{l}+1)} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - (j_{sa}^s)!)}$$

$$\frac{1}{(\mathbf{n} - l_s^s - j_s - s)!}$$

$$\frac{(l_s^s - l + 1)! \cdot (j_s - 2)!}{(l_s^s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_i - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + s \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s - j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + s = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = s \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I > \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s > j_{sa}^s \wedge s = s + \mathbb{m} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge z = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}+s-l-j_{sa}+1)} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{sa}+j^{sa}-j_i}}{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-j_{ik}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_i+j_i-\mathbf{n}+1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(D+j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}-\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(\mathbf{l}_{sa}-\mathbf{l}+1)} \sum_{j_i=l_{sa}+s-\mathbf{l}-j_{sa}+2}^{l_i-\mathbf{l}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(n_{sa}-j^{sa}+1)! \cdot (n_s-\mathbf{n}+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - \mathbf{n} - 1)!}{(n_s + \mathbf{n} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - l - 1)!}{(l_i + l_s - l_{sa} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i + l_s - l_{sa})!}{(j^{sa} + l_i - l_s - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - J_i)!}{(D + \mathbf{n} - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, l_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{l_{ik}+s-l-j_{sa}^{ik}+1} \\ \sum_{j_i=l_i+n-D}^{(j_i+l_{ik}-s)} \sum_{j_{ik}=j^{sa}+l_{ik}-n}^{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=n-j_i+1}^{(n_i-n_{is}-1)!} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\infty} \sum_{\substack{j_s = j_{ik} + l_{sa} \\ (j_{ik} + l_{ik} - l_{sa} - j_{sa} + n + j_{sa} - k) < j_{ik}}} \sum_{\substack{i_{ik} + l_{ik} - l_{sa} - j_{sa} + n + j_{sa} - k \\ (j_{ik} + l_{ik} - l_{sa} - j_{sa} + n + j_{sa} - k) < j_{sa}}} \sum_{\substack{j_i = l_{ik} + j_{sa} + 2 \\ (l_{ik} + j_{sa} + 2) < j_i}} \sum_{\substack{(l_{ik} + j_{sa} + 2) - j_i \\ (l_{ik} + j_{sa} + 2) - j_i < l_i - l + 1}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{\substack{(n_i - j_s + 1) \\ (n_i - j_s + 1) < n_{ik}}} \sum_{\substack{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1 \\ (n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1) < n_{sa}}} \sum_{\substack{n_{sa} + j^{sa} - j_i \\ (n_{sa} = \mathbf{n} - j^{sa} + 1) < n_{sa} + j^{sa} - j_i}} \sum_{\substack{n_s = \mathbf{n} - j_i + 1 \\ (n_s = \mathbf{n} - j_i + 1) < n_s + j^{sa} - \mathbb{k}_1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\)} \sum_{j_i+n-D}^{\mathbf{l}_{ik}+s-\mathbf{l}-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-\mathbb{k}_1}^{n_{ik}+j^{sa}-j_i}$$

$$\sum_{(n_{sa}=n_{is}-\mathbf{l}_{ik}-j_{sa}+s-1)}^{(\)} \sum_{n_{is}+j^{sa}-j_i}^{n_{is}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_{is} - j^{sa} - j_i + s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \leq \mathbf{n} < n \wedge \mathbf{l}_i > D - \mathbf{n} - 1 \wedge$$

$$2 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = j_{sa} - j_{sa}^{ik} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \leq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^i \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=l_s+n+j_{sa}-D-1)}^{(j_i+l_i+n-D)} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$(n_{ik}+j_{ik}-\mathbb{k}_2) n_{sa} - j^{sa} - j_i \\ (n_{sa}=j^{sa}+1) \quad n_s=n-j_s-1$$

$$\frac{(n_i - n_s - 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_s+n+j_{sa}-D-1)}^{(l_s+j_{sa}-l)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_i - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D + j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} - \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_s+s-\mathbf{l}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_s+s-\mathbf{l}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i + j_{sa} - s \wedge \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s - \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{(l_i+n+j_{sa}-D-s-1)} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)} \sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - l - 1)!}{(\mathbf{l}_s - l - l + 1, \mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - l_i)!}{(D + j_l - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}-l_{sa}}^n \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{s_a-l+1} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=\mathbb{k}}^{l_{sa}-l+1} (j_s = j_{ik} + l_{sa} - k)$$

$$\sum_{j_{ik}=j^{sa}+l_{sa}-s-a}^{l_{sa}-l+1} (j^{sa} = \mathbf{l}_{sa} - j_{sa} - D - s) n_{ik} = n_s - j_{sa}$$

$$\sum_{i=n+\mathbb{k}}^n (n_i - j_s + 1) \sum_{n_{ik}=n_s + j_s - j_{ik} - \mathbb{k}_1}^{n_i - j_s + 1} n_{ik}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} n_s = n_{sa} + j^{sa} - j_i$$

$$\frac{(3 \cdot n_{is} + 3 \cdot j_s - j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - j_s - n_{sa} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa} - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{(j_s, j_{ik}, j^{sa}, j_i) + l_s - l_{ik}} \\
&\quad \cancel{(l_i + n + j_{sa} - D - s - 1)} \cancel{j_i = l_i - l + 1} \\
&\quad \cancel{- l_{sa} (j^{sa} = l_{ik} + n - D - j_{sa})} j_i = l_i - l + D \\
&\quad \sum_{n+k}^n \sum_{(n_{is}, n_{ik}, n_{sa}, n_s) + k - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
&\quad \cancel{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_{sa} + j^{sa} - j_i}^{n_{sa} + j^{sa} - j_i} \\
&\quad \cancel{(n_i - n_{is} - 1)!} \\
&\quad \cancel{2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
&\quad \frac{(n_i - n_{is} - \mathbb{k}_1 - 1)!}{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!} \\
&\quad \cancel{(- 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(- j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \\
&\quad \frac{(n_{sa} - n_s - 1)!}{(- j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \\
&\quad \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
&\quad \frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
&\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\left(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}_1-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}-s+1)}^{(n_{ik}+j_{ik}-\mathbb{k}_1)} n_{sa}! \cdot j^{sa}-j_i \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_s-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
& \frac{(n_{sa}-n_s-1)!}{(j^{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\left(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1\right)} \sum_{j_i=j^{sa}+s-j_{sa}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right. \left.\right)} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s)!}{(l_s - l - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot \frac{(D - \mathbf{n})!}{(D - j_i - \mathbf{n})! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} \wedge j^{sa} + s - j_{sa}^{ik} \leq j_i \leq j_{il} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge j_{sa}^{ik} + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > \mathbf{n} \wedge s = s + \mathbb{k} \wedge$$

$$\exists z : z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{n} \sum_{(j^{sa}=l_s+n+j_{sa}-D-1)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa} - 1) \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{n} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_l-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{l} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_{sa} - s)!} \cdot$$

$$\frac{(\mathbf{l}_i - l_i)!}{(\mathbf{l}_i - n - \mathbf{l} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{l_{ik}=l} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \left(\dots \right)$$

$$\sum_{j_{sa}=j^{sa}+l_{ik}} \sum_{(j^{sa}-l_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n=k}^{\mathbf{n}} \sum_{(n_{is}=n+k-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i} \left(\dots \right)$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
& f_z S_{j_s, j_{ik}, j^{sa}, j_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \sum_{(j_i=l_i+n-D)} \\
& \sum_{(n+j_{sa}^{ik}-D-s-1)} \sum_{(j_{sa}(j^{sa}=j_{sa}+l_{sa}-l_{ik}))} \sum_{(j_i=l_i+n-D)} \\
& \sum_{(j_{ik}=l_{sa}+n+j_{sa}^{ik}-1)} \sum_{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)} \\
& \sum_{(n_{sa}=n-j^{sa}+1)} \sum_{(n_s=n-j_i+1)} \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}+j^{sa}-j_i)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

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$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=\mathbf{l}} \sum_{\substack{() \\ (j_s=j_{ik}+l_s-l_{ik})}} \begin{aligned} & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{\substack{() \\ (j^{sa}=j_{ik}+l_{sa})}}^{\substack{-l+1 \\ (-j^{sa}-l)-j_{sa}}} \\ & \sum_{n_i=n+\mathbb{k}_1-j_i}^n \sum_{\substack{(n_i-j_s) \\ (n_i-j_{ik}-j^{sa})}}^{\substack{n_{is}+j_s-j_{ik} \\ (n_{is}-j_{ik}-j^{sa})-j_i}} \sum_{\substack{(n_{is}=n-j_s+1) \\ (n_{is}-j_{ik}-\mathbb{k}_1-1)}}^{\substack{n_s=n-j_i+1 \\ (n_s-j_i+1)}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - n_{is} - 1)! \cdot (n_i - n_{is} - j_s + 1)!}. \\ & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - n_{is} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}. \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}. \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}. \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}. \\ & \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}. \\ & \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}. \\ & \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \end{aligned}$$

$$\begin{aligned}
& \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j_s=j_{ik}+l_{sa}-l_{ik})}^{\infty} \sum_{j_i=j_{sa}^{sa}+s-i}^{\infty} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+s-i-j_{ik}-k_1}^{\infty} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j-k_2)}^{\infty} \sum_{n_s=n_{sa}+j_{sa}^s}^{\infty} \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - l - k - k_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n - j_{sa}^{sa} - l_i - n - l - k - k_1 - j_{sa}^s)!} \cdot \\
& \frac{1}{(j_{sa}^s - j_s - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$\begin{aligned}
& D \geq n < n \wedge l_s > D - n + 1 \wedge \\
& 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
& j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{ik}^a \leq j_i + j_{sa}^{sa} - 1 \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
& l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge
\end{aligned}$$

$$D \geq n < n \wedge l = k > \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > j_{sa} = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_i+\mathbf{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_s)}^{\left(\right)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-\mathbf{n}-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (j_s-n_i-n_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=j_{ik}+l_s-l_s)}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_s)}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n-j^{sa}+1)}}^{\sum_{n_s=n-j_i+1}} n_{sa} + j^{sa} - j_i$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_l - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa} - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^{\infty}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - l_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\mathbf{l}}\sum_{(j_s=j_{ik}+\mathbf{l}_{sa}-l_{ik})}^{(\)}\sum_{j_{ik}=\mathbf{l}_s+\mathbf{n}+j_{sa}^{ik}-D-1}^{n+j_{sa}^{ik}-D-s-1}\sum_{(j^{sa}=j_{ik}+\mathbf{l}_{sa}-l_{ik})}^{(\)}\sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{l_i-l+1}\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_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_{sa}=\mathbf{n}-j^{sa}+1}^{n_{sa}+j^{sa}-j_i}\sum_{n_s=\mathbf{n}-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_s - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa}) \cdot (j_i + j_{sa} - \mathbf{l}_s - s)!}.$$

$$\frac{(\mathbf{l}_i - l_i)!}{(i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{i=l}^{n-k} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{(n_i-j_s+1)} \dots$$

$$\sum_{j_{ik}=1+n+j_{sa}}^{n+j_{sa}-l} \sum_{j_i=j^{sa}+s-j_{sa}}^{(n_i-j_s+1)} \sum_{j_l=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=\mathbf{l}}^{\mathbf{l}_s} \sum_{(j_s=j_{ik}-l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=\mathbf{l}_i+n+j_{sa}^{ik}-D}^{l_s+j_{sa}^{ik}-\mathbf{l}} \sum_{(j^{sa}=j_{ik}+l_{sa}-j_i)}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\)}$$

$$\sum_{n_i=n+\mathbb{k}-j_s}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}-\mathbf{l}_1)}^{(\)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}$$

$$\frac{(\mathbf{l}_s - n_{is} + 2 \cdot j_s - n_{sa} - n_s - j_i - j^{sa} - j_{sa} - \mathbf{l} - \mathbf{l}_i - \mathbf{l}_{sa} - \mathbf{l}_{ik} - \mathbf{l}_s - \mathbf{l} - 1 - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} - 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n \wedge l_s > n - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i \wedge j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} + j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=l}^{\infty} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}^{(l_i + n - D - s)} \\
 & \sum_{j_{ik} = j_s + l_{ik} - l_s}^{\infty} \sum_{(j^{sa} = j_{ik} + n - l_{ik})}^{\infty} \sum_{j_i = j_s + n - D}^{l_i - l + 1} \\
 & \sum_{n_i = n + l_{ik} - j_s + 1}^n \sum_{(n_{is} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - \mathbb{k}_1 - 1)} \sum_{n_{sa} = n + j_{sa} - j_i + 1}^{n_{is} + j_s - n - \mathbb{k}_1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - l_s + 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - l_{ik} - j_s + 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - l_{ik} - j_{sa} + 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{k=l}^{\infty} \sum_{(j_s = l_{sa} + n - D - s + 1)}^{(l_{sa} - \mathbf{l} - j_{sa} + 2)}
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\ \right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j=n-j_i+1}^{n_{sa}+j^{sa}} \\
& \frac{(n_i-l_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_i+n-D-s+1)} \\
& \sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\ \right)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\begin{aligned} & \frac{1}{(n + j_{sa}^s - j_s - l)^!} \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\ & \frac{(D - l)^!}{(D + j_{ik}) \cdot (n - l_i)^! \cdot (n - j_i)^!} \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > j_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s > 4 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_2 z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right.} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - n - 1)!}{(n_s + j_s - n - 1)! \cdot (n_s - j_i)!}.$$

$$\frac{(n - l - 1)!}{(n - l_s - l - 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_i - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + n - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{l_i-l+1}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{n} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(\mathbf{l}_i - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{\substack{i_{ik}=j_s+l_{ik}-l_s \\ i_s=n+\mathbb{k}}} \sum_{\substack{j_{ik}+l_{sa}-l_{ik} \\ (n_{is}=n+\mathbb{k}-j_s+1)}} \sum_{\substack{j_i=j^{sa}+s-j_{sa} \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}} \\ (l_{ik}-\mathbf{l}-j_{sa}^{ik}+2) \\ \sum_{\substack{(n_i-j_i-1) \\ n_i=n+\mathbb{k}}} \sum_{\substack{(n_{is}-j_{sa}^{is}+2) \\ n_{is}=n+\mathbb{k}-j_s+1}}$$

$$\sum_{\substack{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ n_s=n_{sa}+j^{sa}-j_i}} \sum_{\substack{(n_{sa}+j_{sa}-j^{sa}-\mathbb{k}_1) \\ n_{sa}=n+\mathbb{k}-j_s+1}} \\ (n_{sa}-j_{sa}^{sa}+2) \\ \sum_{\substack{(n_{sa}+j_{sa}-j^{sa}-\mathbb{k}_1) \\ n_{sa}=n+\mathbb{k}-j_s+1}}$$

$$\frac{(n_{is} + 2) - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
& f_z S_{j_s, j_{ik}, j_{sa}, j_i} \\
& \sum_{k=l}^{(l_i - l - D - s)} \sum_{(j_s - j_{ik} - j_{sa})=l}^{l_i - l + 1} \sum_{l_i + n - D}^{l_i - l + 1} \\
& \sum_{n_i = n + \mathbb{k}}^{n_i - j_{ik} - j_{sa} - \mathbb{k}_1 - 1} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{is} + j_{sa} - j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.
\end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_{sa}=s-a+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+i_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-i_k+1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_2)}^{(n_{sa}+j_{sa}-\mathbb{k}_2)} \sum_{n_{sa}=n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_{sa}-n_s-1)!}{(n_{sa}-n_s-1) \cdots - n_{is}-1)!}.$$

$$\frac{(n_{is}-n_i-\mathbb{k}_1-1)!}{(j_{ik}-\mathbb{k}_1-1)! \cdot (n_i+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{ik}-1)!}{(j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{lk}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n+\mathbb{k}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \dots - 2 \cdot \mathbb{k} - \mathbb{x}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \dots - 2 \cdot \mathbb{k} - \mathbb{x}_2 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} - j_{sa} - j_s - s)!}.$$

$$\frac{(l_s)}{(l_s - l - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i)}{(l_i - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq \dots \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq \dots - a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j_i - s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = \dots \wedge l_{sa} + j^{sa} - j_{sa}^{ik} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \dots < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s > \mathbb{k} + \mathbb{k} \wedge$$

$$\mathbb{z} = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=l_i+n-D}^{(l_{sa}-l+1) \quad l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \quad n_{sa}+j^{sa}} \sum_{i=n-j_i+1}^{(n_{sa}-j^{sa})}$$

$$\frac{(n_i-l_{sa}-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{is}-1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=l}^{(\)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - l)^!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{ik}) \cdot (\mathbf{n} - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - l_{ik} \wedge l_i - j_{sa} - s > l_i \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^i < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \bullet 4 \wedge s = s \wedge \mathbb{k} \wedge$$

$$\mathbb{k}_{z+1} = 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{l_i-l+1} \sum_{j_i=l_i+n-D}^{n_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n-j^{sa}+1)}}^{\sum_{n_s=n-j_i+1}} n_{sa} + j^{sa} - j_i$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_l - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa} - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_i+n-D}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_{ik}+s-l-j_{sa}^{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\mathbf{l}}\sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_s+n+j_{sa}-D-1)}^{(l_s+j_{sa}-l)} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_i - s)!}.$$

$$\frac{(\mathbf{l}_i - \mathbf{l}_i)!}{(\mathbf{l}_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{j_s=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)} l_s+s-l$$

$$\sum_{j_{ik}=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_s+s-\mathbb{k}_1}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f(z) &= \sum_{l=1}^{\infty} \left(\sum_{i=1}^{l_s - l_{ik}} \right) \sum_{j=1}^{l_i - l + 1} \\ &\quad \sum_{j_{ik} = i + n + j_{sa}^{ik} - D - j_{sa}}^{l_{sa} + j_{sa}^{ik} - l + 1} \sum_{j_{sa} = j_{ik} + l_{sa} - l_{ik}}^{n_i - j_{sa} + 1} \\ &\quad \sum_{n_i = n + \mathbb{k}}^{n} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_{is} - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\ &\quad \sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{n_{is} + j^{sa} - j_i} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{sa} + j^{sa} - j_i} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ &\quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \end{aligned}$$

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$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_i)}^{\infty}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa})}^{\infty} \dots -j_{sa}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{sa}+j_{ik}-j^{sa}}^{n_{ik}-j_{sa}}$$

$$(n_{sa}+j_{ik}-j^{sa}) \dots n_s=n_{sa}+j^{sa}-j_i$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - n + 1 \wedge$$

$$D + \mathbf{l}_s + s - n - l_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^s \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{\left(\right)} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{l_i-l+1} \sum_{(n_{is}=n+\mathbb{k}-1)}^{l_i+n-D}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_i+1)}^{n_{is}+j_s-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j_s-\mathbb{k}_2)}^{(n_{sa}+j^{sa}-j_l)} \sum_{(n_{sa}=n-j_s-j_i+1)}^{n_{sa}+j^{sa}-j_l}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_i - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_i + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\binom{n}{2}} \sum_{j_i=j^{sa}+s-j_{sa}}^{\binom{n}{2}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{lk}=n_{is}+j_s-j_{ik}-\mathbb{k}}^{\binom{n}{2}} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{n}{2}} n_s=j_s+j^{sa}-j_i \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbb{k} - \mathbb{k}_1 - 2 \cdot \mathbb{k} - \mathbb{k}_2 - j_{sa})!} \cdot \\
& \frac{1}{(n - j_s - j_{sa} - s)!} \cdot \\
& \frac{(l_s)}{(l_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i)}{(l_i - j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{n} < D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n - a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j_{sa} - s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s > n - D + \mathbb{k} \wedge$$

$$\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=l_i+n-D}^{(\)} l_i-l+1$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=j-n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{is}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{(\mathbf{l}_{ik}-\mathbf{l}-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\)}$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\begin{array}{c} \\ \end{array}\right)} \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - l)^!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l + 1)^!}{(D + j_{ik}) \cdot (\mathbf{n} - l_i)^! \cdot (n - j_i)^!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - l_{ik} \wedge l_i - j_{sa} - s > l_i \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^i < j_{sa}^{ik} - 1$$

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \neq 4 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_{z+1} = 2 \wedge \mathbb{k} = \mathbb{k}_1 - \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s}^n \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i = l_i + n - D}^{l_i - l + 1}$$

$$\sum_{n_l = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_i - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa} - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{()}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\varsigma_{i_c, i_s, l_s, l_{ik}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - n_s - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i - \mathbf{l} - 1)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - l_i)!} +$$

$$\sum_{\substack{i=s-l+1 \\ i=l_{ik}+n-D}}^{l_{ik}-l+1} \sum_{\substack{j=j_{sa}+l_{sa}-l_i \\ j=j_{sa}+l_{sa}-l_i}}^{\infty} \sum_{\substack{k=j_i+1 \\ k=l_{ik}+s-l-j_{sa}^{ik}+2}}^{l_i-l+1}$$

$$\sum_{\substack{n=n+\mathbb{k} \\ (n_{is}=n+\mathbb{k}-j_s+1)}}^n \sum_{\substack{(n_{is}-j_s+1) \\ n_{ik}=n+\mathbb{k}_2-j_{ik}+1}}^{(n_{is}-j_s+1)} \sum_{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ n_{sa}=n-j^{sa}+1}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n-j^{sa}+1)}}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=\mathbf{n}-j_i+1}}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{l_{ik}+j_{sa}-\mathbf{l}-j_{sa}^{ik}+1}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{l_{i+1}-D}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_i=n+\mathbf{k}-(n_{ik}+j_{sa}-\mathbf{l}_i-j_{sa}^{ik})}^n \sum_{n_{ik}=n_i-(n_{ik}+j_{sa}-\mathbf{l}_i-j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{i_s-j_{ik}-\mathbf{k}_1}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{(n_{sa}=n_i+j_{sa}-j_{ik}-j^{sa})}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\begin{array}{c} \\ \end{array}\right)} \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - s - 2 \cdot \mathbf{k} - \mathbf{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbf{k} - \mathbf{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} - s \wedge \mathbf{l}_s > D - s + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbf{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)} \\
&\sum_{j_{ik}=l_s+\mathbf{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_i+n-1}^{l_s+s-\mathbf{l}} \\
&\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}-\mathbb{k}_1)}^{n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1} \\
&\sum_{(n_{sa}=n+j_{sa}-j_i)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j_{sa}-j_i}^{n_{ik}+j_{ik}-j_{sa}+1} \\
&\sum_{n_s=n-j_i+1}^{n-j^{sa}+1} \frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\frac{(n_i - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - n_s - 1)!}{(n_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
&\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}
\end{aligned}$$

guiding

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=n-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{is}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=l}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(\right)} \sum_{(j^{sa}=j_i+l_i-l_{sa})}^{\left(\right)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\left(\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left.\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\begin{aligned} & \frac{1}{(\mathbf{n} + j_{sa}^s - j_s - l)^!} \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\ & \frac{(D - 1)!}{(D + j_{ik}) \cdot (\mathbf{n} - l_i)! \cdot (n - j_i)!} \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = j_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2 z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left.\right)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(\mathbf{n} - l - 1)!}{(l_s - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - n - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-1} \sum_{(j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_i+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - n_s - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i - l_i - 1)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{\substack{j_{ik}=j_s+ j_{sa}^{ik}-j_{sa}}}^{\left(l_{ik}+j_{sa}-j_{sa}^{ik}+1\right)} \sum_{\substack{(j^{sa}=l_i+j_s-j_{sa}-D-s)}}^{\left(j^{sa}+j_{sa}^{ik}-n_s-l_{ik}\right)} \sum_{\substack{j_i=j^{sa}+l_i-\mathbf{l}_{sa}}}^{\left(\mathbf{l}_i+l_i-j_i\right)}$$

$$\sum_{\substack{n=\mathbb{k} \\ (n_{is}=n+\mathbb{k}-j_s+1)}}^{\left(n_i-1\right)} \sum_{\substack{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}}^{\left(n_{is}-1\right)} \sum_{\substack{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_s=n_{sa}+j^{sa}-j_i}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, i_i} = \sum_{k=l (j_s=j_{ik})}^{l_i} \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{n_i=n+\mathbb{k} (n_{is}=\mathbb{k}-j_s+1)}^{n} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{sa})} \sum_{n_{is}=n-j_{sa}+1}^{n_i-j_{sa}-\mathbb{k}_1} \sum_{n_s=n-j_i+1}^{(n_{is}-j_{ik}-j_{sa}-\mathbb{k}_2) n_{sa}+j_{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j_{sa} - \mathbf{l}_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

gündün

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\)}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_{ts}=s^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-1+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+j_{ik}-\mathbb{k}_1}^{n_{is}+j_{is}-\mathbb{k}_1} \\
& \sum_{(n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2)} \sum_{(n_{sa}=n-j_{sa}-1)}^{n_{sa}+j^{sa}-s} \\
& \frac{(n_{is}-n_i-\mathbb{k}_1-1)!}{(j_i-2)! \cdot (j_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{is}-n_i-\mathbb{k}_1-1)!}{(j_i-j_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j_i-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-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \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)!} - \\
& \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\)}
\end{aligned}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_s+j_{sa}-l)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\dots+j^{sa}-j_i}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} - l_s - j_s - s)!}$$

$$\frac{(l_s - l + 1)! \cdot (j_s - 2)!}{(l_s - l - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_s - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + s \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s - j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa} + s = l_s \wedge j_{ik} + j_{sa}^{ik} - j_{sa} > s \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I > \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_i - 1 \wedge j_{sa}^{ik} = j_i - 1 \wedge j_{sa} < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{i-1}, \dots, j_{sa}^i\} \wedge$$

$$s > \mathbb{k} \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge z = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_s)}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\left(\right.} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_s)}^{\left.\right)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(\mathbf{n} - \mathbf{l} - 1)!}{(n_s + l_s - \mathbf{n} - \mathbf{l} - 1)! \cdot (j_s - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(n_s + l_s - \mathbf{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + \mathbf{n} - \mathbf{l}_i - 1)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_{ik}-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(\)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, l_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)} \sum_{\substack{j_{ik}=l_s+n+j_{sa}-D-1 \\ (j_{sa}=l_t+n+j_{sa}-D-s)}}^{\substack{i_{ik}-1 \\ (l_i+l_{sa}-l-s+1)}} \sum_{\substack{j_i=j^{sa}+l_i-l_{sa} \\ n_i=n+\mathbb{k} \\ (n_{is}=n+\mathbb{k}-j_s+1)}}^{\substack{(l_i+n-j_s+1) \\ (j_{sa}=l_t+n+j_{sa}-D-s)}} \sum_{\substack{n_i=n-j_{ik}-\mathbb{k}_1 \\ n_{ik}=n+\mathbb{k}_2-j_{ik}+1}}^{\substack{(n_i-j_s+1) \\ (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ (n_{sa}=n-j^{sa}+1)}}^{\substack{n_{is}+j_{sa}-j_{ik}-\mathbb{k}_1 \\ (n_{sa}+j^{sa}-j_i)}} \sum_{\substack{n_s=n-j_{i+1} \\ (n_s=j_{i+1}-1)}}^{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}+j^{sa}-j_i)}} \sum_{\substack{(n_i-n_{is}-1)! \\ ((j_s-2)! \cdot (n_i-n_{is}-j_s+1)!)} .}^{\substack{(n_i-n_{is}-1)! \\ ((j_s-2)! \cdot (n_i-n_{is}-j_s+1)!)} .}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} .$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} .$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} .$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{i=l}^{l_s + j_{sa}^{ik} - l} (j_s = j_{ik} + l_s - i)$$

$$\sum_{k=l_i + \mathbf{n} + j_{sa}^{ik} - s}^{l_s + j_{sa}^{ik} - l} (j^{sa} = j_{sa} - j_{ik} - k)$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{i_s=n-\mathbb{k}-j_s+1}^{n_i-j_s+1} \sum_{i_k=n+\mathbb{k}_2-j_{ik}+1}^{n_i+j_s-j_{ik}-\mathbb{k}_1} \sum_{i_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{\substack{j_{ik}=l_i+n+j_{sa}^{ik}-D-s \\ j_{ik}=l_i+n+j_{sa}^{ik}-D-s}}^{l_s+j_{sa}^{ik}-l} \sum_{\substack{(n_i-j_s+1) \\ (n_i=j_{ik}+j_{sa}-j_{sa}^{ik}) \\ n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}}}^{()} \sum_{\substack{j_{ls}=s+a+l_i-l_{sa} \\ j_{ls}=s+a+l_i-l_{sa}}}^{()}$$

$$\sum_{\substack{n_i=n+\mathbb{k} \\ (n_{is}=n+\mathbb{k}-1)}}^n \sum_{\substack{(n_i-j_s+1) \\ (n_i=j_{ik}+j_{sa}-j_{sa}^{ik}) \\ n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}}}^{()} \sum_{\substack{(n_{sa}=n_{is}+j_{ik}-j_{sa}^{ik}-s+1) \\ (n_{sa}=n_{is}+j_{ik}-j_{sa}^{ik}-s+1)+j_{sa}-j_i}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_{is} - j_{sa}^{sa} - j_{sa}^{ik} - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_{is} - j_{sa}^{sa} - j_{sa}^{ik} - i - \mathbf{n} - 1 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s = D - \mathbf{n} - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{sa} + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$< j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\begin{aligned} & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_s} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}_1-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{sa}=n-sa+1)}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} n_{sa} - j_i \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - j_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_{sa} - j_i)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D + j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \quad \sum_{k=\mathbf{l}}^{\mathbf{l}_{ik}-\mathbf{l}-j_{sa}^{ik}+2} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)}^{} \\
& \quad \sum_{j_{ik}=j_s+\mathbf{l}_{ik}-\mathbf{l}_s}^{} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right.\left.\right)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}^{} \\
& \quad \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{} \\
& \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.\left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{}
\end{aligned}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i + j_{sa} - s \leq n \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}}^{(\mathbf{l}_i + \mathbf{n} - D - s)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s}^{(l_i + j_{sa} - l - s + 1)} \sum_{(j^{sa} = l_i + \mathbf{n} + j_{sa} - D - s)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - l - l + 1) \cdot (l_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - n - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{l_s} \sum_{(j_s = l_i + \mathbf{n} - D - s + 1)}^{(l_s - l + 1)}$$

$$\sum_{j_{ik} = l_{ik} - l_s}^{l_i + j_{sa} - l - s + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{j_{ik} = j_s + j_{sa} - l_s \\ (j^{sa} = j_{sa} + j_{sa}^{ik})}} \binom{\mathbf{l}_s - j_{sa}}{(j_s = l_t + n - D - s)}$$

$$\sum_{\substack{n+1 \\ (n_{is} = n + j_s + 1)}}^n \sum_{\substack{j_i - j_s + 1 \\ (n_{ik} = n_{is} + j_s - j_{ik})}} \sum_{\substack{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1 \\ (n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}} \sum_{\substack{n_s = n_{sa} + j^{sa} - j_i \\ (n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_i - n_s - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(n_{is} + 3 \cdot j_s - n_s - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{\infty} \sum_{(j_s, j_{ik}, l_s, l_{ik})} \binom{\cdot}{\cdot} \\
&\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j^{ik}-j_{sa}} \sum_{(j_i=j_i+l_{sa})}^{\infty} \binom{\cdot}{\cdot} \binom{l_{ik}+s-l-i}{j_i-l_{ik}} \\
&\sum_{a=n+\mathbb{k}}^n \binom{n_i-j_s+1}{n_{is}-\mathbb{k}-j_s+1} \sum_{s=j_{ik}+1}^{n_i+j_s-j_{ik}-\mathbb{k}_1} \\
&\sum_{a=n-j^{sa}+1}^{(n_i-k_s)} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \frac{n_{sa}+j^{sa}-j_i}{(n_i-n_{is}-1)!} \\
&\frac{(n_i-n_{is}-1)!}{2! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
&\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
&\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
&\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
&\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
&\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!} \cdot \\
&\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
&\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} +
\end{aligned}$$

g i u d i s

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\)} \sum_{j_i=l_{ik}+s-l-j_{sa}^{ik}}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}_1-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_2)}^{(n_{sa}+j_{sa}-1)} \sum_{n_s=n-j_i+1}^{n_{sa}-j_{sa}+1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{ik} - j_s + 1)!}.$$

$$\frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\)} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{()}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} n_s=n_{sa}+j^{sa}-i_s$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s}{(j_s^s - s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot$$

$$\frac{(D - l)!}{(D - j_i - n)! \cdot (n - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} - s \wedge j_{sa}^{ik} + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge j_{sa}^{ik} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^i, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > i \wedge s = s + \mathbb{k} \wedge$$

$$\exists z: z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n-j^{sa}+1)}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\)} \sum_{j_i=l_s+s-l+1}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n-j^{sa}+1)}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - 1)!}{(\mathbf{l}_s - \mathbf{j}_i - \mathbf{l} + 1) \cdot (\mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - l_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_i-j_{sa}}^{(\)} \sum_{(j^{sa}=j_i+\mathbf{l}_{sa}-l_i)}^{(\)} \sum_{j_i=\mathbf{l}_{sa}+\mathbf{n}+\mathbf{s}-D-j_{sa}}^{\mathbf{l}_s+\mathbf{s}-\mathbf{l}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\mathbf{l}_s}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
& S_{j_s, j_{ik}, j_i} = \sum_{k=l}^{\infty} (j_s = j_{ik} + l_s - l_{ik}) \\
& \sum_{j_{ik} = n-D}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} - j_{sa} + n-D)}^{(j^{sa} - j_{sa} + n-D)} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{n_i + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.
\end{aligned}$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=l}^{\mathbf{l}_{ik}-\mathbf{l}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-\mathbf{l}+1} \sum_{(j^{sa}+l_{sa}-l-j_{sa}^{ik})}^{(l_{sa}-\mathbf{l}+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+j_{ik}-j_s+1}^n \sum_{n_{is}=n+\mathbb{k}_1-1}^{n_{is}-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{a=n-j^{sa}+1}^{n_k+j_{ik}-j^{sa}-\mathbf{l}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\begin{aligned}
& \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{\infty} \sum_{j_i=j^{sa}+l_i-l_{ik}}^{\infty} \\
& \sum_{n_i=n+k}^{\infty} \sum_{(n_{is}=n+k-j_s+1)}^{\infty} n_{ik}=n_{is}+j_{ik}-\mathbb{k}_1 \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\infty} n_s=n_{sa}+j_{sa}^s \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_{ik} - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_{ik} - s - \mathbf{n} - \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot \\
& \frac{1}{(j_{sa}^s - j_s - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}
\end{aligned}$$

$$\begin{aligned}
& D \geq \mathbf{n} < n \wedge l_s > \mathbf{D} - \mathbf{n} + 1 \wedge \\
& 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
& j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\
& l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge
\end{aligned}$$

$$D \geq \mathbf{n} < n \wedge \mathbb{k} > \mathbb{D} - \mathbf{n} + 1 \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > j_{sa} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=n-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{is}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right.)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\)} \\ \sum_{j_{ik}=\mathbf{l}_{ik}+\mathbf{n}-D}^{i+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(\mathbf{l}_{sa}-\mathbf{l}+1)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}} \\ \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_{is}-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_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i} \\ \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{sa}=\mathbf{n}-j^{sa}+1)} \sum_{n_s=\mathbf{n}-j_i+1} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} + j_{sa} - j_{ik} - 1)!}.$$

$$\frac{(\mathbf{l}_i - l_i)!}{(\mathbf{l}_i - n - \mathbf{k}_1 - 1)! \cdot (n - j_i)!}.$$

$$\sum_{i=k}^n \sum_{\substack{j_s = j_{ik} + l_s - l_{ik} \\ j_{ik} = l_{sa} - l_{ik} + j_{sa}^{ik} - l_{ik}}} \sum_{\substack{j_i = j^{sa} + l_i - l_{sa} \\ j_{ik} + j_{sa} - j_{sa}^{ik} = l_{sa} - l_{ik} + j_{sa}^{ik} - l_{ik}}}$$

$$\sum_{\substack{n_i = n + \mathbf{k} \\ (n_{is} = n + \mathbf{k} - j_s + 1)}} \sum_{\substack{(n_i - j_s + 1) \\ (n_{ik} = n + \mathbf{k}_2 - j_{ik} + 1)}} \sum_{\substack{n_{is} + j_s - j_{ik} - \mathbf{k}_1 \\ (n_{ik} + j_{ik} - j^{sa} - \mathbf{k}_2) \\ (n_{sa} = n - j^{sa} + 1)}} \sum_{\substack{n_{sa} + j^{sa} - j_i \\ n_s = n - j_i + 1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\mathbf{l}_{ik}-\mathbf{l}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_s}^{l_{ik}-\mathbf{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{ik})}^{(\)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(\)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}-j_i}^{n} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}$$

$$\frac{(\mathbf{S} \cdot n_{is} + 2 \cdot j_s - \mathbf{l} - n_s - \mathbf{j} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - \mathbf{l} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l)}^{\infty} \\ \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=l_{sa})}^{(l_{sa}-l+1)} \\ \sum_{n_i=n+j_{ik}-j_{sa}+1}^n \sum_{(n_i-j_{sa})}^{(n_i-j_{sa}-1)} \sum_{n_{is}=n+j_{ik}-j_{sa}+1}^{n_{is}+j_{sa}-j_{ik}-1} \\ \sum_{(n_{sa}=n+j_{sa}+1)}^{n_{sa}-j_{sa}} \sum_{n_s=n-j_i+1}^{n_s+j_{sa}-j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - l_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-\mathbf{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-\mathbf{l}+1)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{ik}+j_{ik}>n_{sa}-j_i)}^{(n_{sa}=n_{is}-\mathbf{s}+1)} \sum_{n_{sa}=n_{is}-j_i}^{n_{sa}-j_i} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s - 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \end{aligned}$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-\mathbf{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}} \end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-i_s}^{(n_i-j_s+1)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} \wedge j^{sa} + s - j_{sa}^{ik} \leq j_i \leq$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge j^{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^s, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > \dots \wedge s = s + \mathbb{k} \wedge$$

$$\exists z : z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_{sa}, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{n} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j^{sa} + l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)}} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - l - \mathbf{l} + 1) \cdot (\mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - l_{ik} - l_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s = l_{sa} + \mathbf{n} - D - j_{sa} + 1)}^{(l_{ik} - l - j_{sa}^{ik} + 2)}$$

$$\sum_{j_{ik} = l_{sa} + l_{ik} - l_s}^n \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{(n_i - j_s + 1)}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_s, j_{ik}, j_i} = \sum_{k=l}^{n-D-j_{sa}} \sum_{(j_s=l_s+n-D)}^{(j_s+l_{ik}-l_s+n-D-j_{sa})}$$

$$\sum_{j_s=l_s+l_{ik}-l_s}^{n-D-j_s+1} \sum_{(j_s+l_{sa}+n-D)}^{(l_{sa}-l_s+n-D-j_s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{i=n+\mathbb{k}}^{n_{is}=n+\mathbb{k}-j_s+1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{(\mathbf{l}_s - \mathbf{l} - 1)} \sum_{j_{ik}=l_{sa}+n-j_{sa}-1}^{l_{sa}+n-1} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_s - \mathbf{l} + 1)}$$

$$\sum_{n_i=n+j_{sa}+1}^n \sum_{n_{ik}=n+\mathbf{k}_2-j_{ik}+1}^{n+\mathbf{k}_1-j_{ik}} \sum_{n_s=n-j_i+1}^{n-\mathbf{k}_1-j_{ik}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!}.$$

$$(n_{ik} - n_{sa} - 1)!$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$(n_{sa} - n_s - 1)!$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$(n_s - 1)!$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-l-1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+l_i-l}^{} \text{X}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{} \text{Y}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{} \sum_{n_s=n_{sa}+j^{sa}-1}^{} \text{Z}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_s - n - j^{sa} - l_i - \mathbf{n} - \mathbb{k} - \mathbb{k}_1 - j_{sa})!} \cdot \text{A}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \text{B}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot \text{C}$$

$$D \geq \mathbf{n} < n \wedge l_s = D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa} + 1 \wedge j_s - j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + s - l_s = l_s \wedge l_s - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\{s, \mathbf{n}, \mathbf{l}, \mathbb{k}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i-\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\frac{(n_{ik}+j_{ik}-\mathbb{k}_2) n_{sa}-j^{sa}-j_i}{(n_{sa}=j^{sa}+1) \quad n_s=n-j_s-1}$$

$$\frac{(n_i - n_s - 1)!}{(j_s - 2) \cdot (n_i - n_s - j_s + 1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\)} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{l_{ik}+s-l-j_{sa}^{ik}+1} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{()}^{()} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} n_s=n_{sa}+j^{sa}-i_s$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot \\ \frac{(D - \mathbf{n})!}{(D - j_i - \mathbf{n})! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} +$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa}^{ik} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \geq l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_1, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \dots, \dots, j_{sa}^s\} \wedge$$

$$s > 4 \wedge s < s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 \wedge \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{()} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(l_s - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{l}_i + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\left(\right.\left.\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\left(\right.\left.\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(\right.\left.\right)} \sum_{(j^{sa}=j_i+\mathbf{l}_i-\mathbf{l}_{sa})}^{\left(\right.\left.\right)} \sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{l_s+s-\mathbf{l}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_s+s-\mathbf{l}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.\left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\right.\left.\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j^{sa} - s - j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s = j_{ik} + \mathbf{l}_s - \mathbf{l}_{ik})}^{(\)}$$

$$\sum_{j_{ik} = l_{ik} + \mathbf{n} - D}^{l_{ik} - \mathbf{l} + 1} \sum_{(j^{sa} = l_i + \mathbf{n} + j_{sa} - D - s)}^{(l_{sa} - \mathbf{l} + 1)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{sa} + j^{sa} - j_i} \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - l + 1 - l + 1 - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - l_{ik} - l_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{sa} + l_{ik} - l_{sa} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_i-j_{sa}}^{(n_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(\)} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f z^{\omega_{j_{sa}^i, l_{ik}, j^{sa}, j_i}} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \sum_{(l_i+l_{sa}-l_{ik}-n_{ik}+n_{sa}-D-s)}$$

$$\sum_{j_s=j_{ik}+n-D-s}^{l+1} \sum_{l_i=l_{ik}+n+j_{sa}-D-s}^{(l_i+j_{sa})-l-s+1} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\mathbf{l}} \sum_{\substack{() \\ (j_s=j_{ik}-l_s-l_{ik})}}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D}^{l_{ik}-l+1} \sum_{\substack{() \\ (j^{sa}=j_{ik}+j_{sa}-j_{ik}-l_i+l_{sa})}} \sum_{\substack{() \\ (j_i=j^{sa}+l_i-l_{sa})}}$$

$$\sum_{n_i=n+\mathbb{k}}^{\mathbf{n}} \sum_{\substack{() \\ (n+\mathbb{k}-j_s)}} \sum_{\substack{() \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}}$$

$$\sum_{\substack{() \\ (n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}} \sum_{\substack{() \\ (n_s=n_{sa}+j^{sa}-j_i)}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

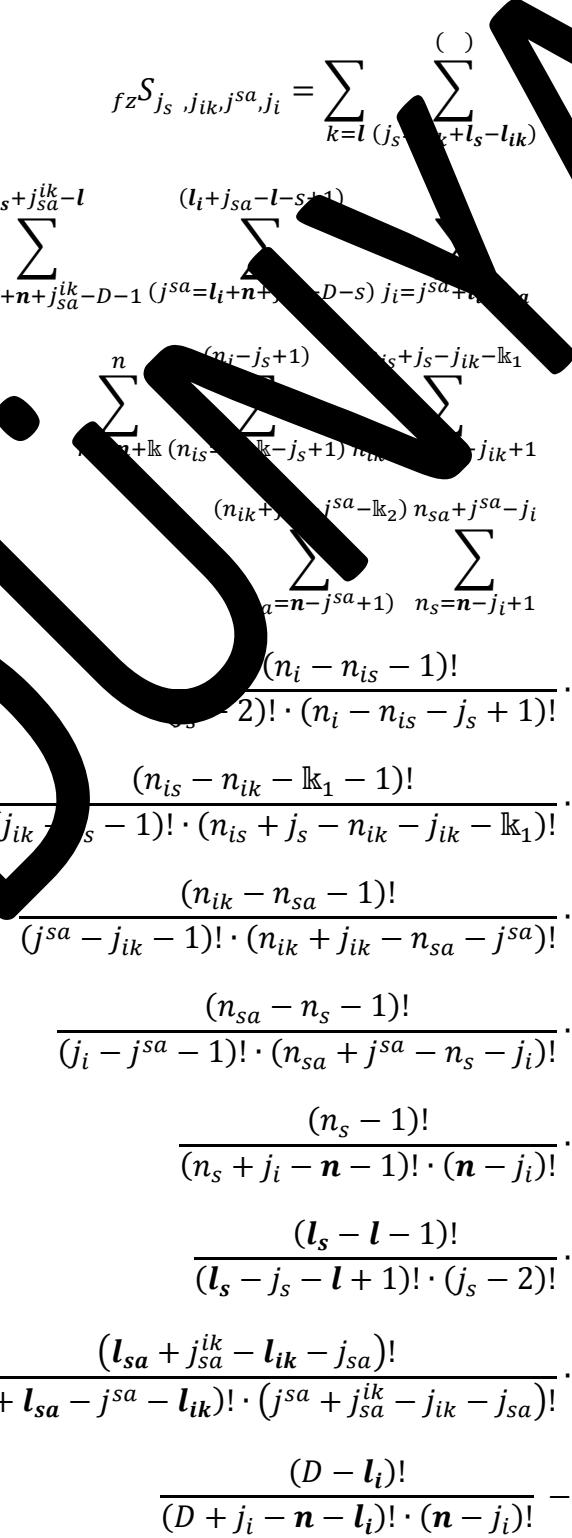
$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, l_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{\lfloor \frac{D}{2} \rfloor} \sum_{(j_s, j_{ik}, l_s, l_{ik})} \\
&\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} j_i=j^{sa}+n-j_{sa} \\
&\sum_{n-i+k}^{n-i-j_s+1} \sum_{(n_{is}+j_s-k-j_{sa}+1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} n_{is}+j_s-n_{ik}-j_{ik}+1 \\
&\sum_{a=n-j^{sa}+1}^{(n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)} n_{sa}+j^{sa}-j_i \\
&\sum_{n_s=n-j_i+1}^{(n_i-n_{is}-1)!} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
&\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
&\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
&\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
&\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
&\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!} \cdot \\
&\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
&\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} -
\end{aligned}$$

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$$\begin{aligned}
& \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+l_i-l}^{\infty} \\
& \sum_{n_i=n+k}^{\infty} \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}^{ik}}^{\infty} \sum_{n_s=n_{sa}+j_{sa}^{ik}}^{\infty} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)}^{\infty} \sum_{n_s=n_{sa}+j_{sa}^{ik}}^{\infty} \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - k - k_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - n - k - k_1 - j_{sa}^{ik})!} \cdot \\
& \frac{1}{(j_{sa}^{ik} + j_{sa} - j_s - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
& D \geq n < n \wedge l_s > D - n + 1 \wedge \\
& D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge \\
& 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s - j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
& j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge \\
& l_{ik} - j_{sa}^{ik} + s \leq l_s \wedge l_s - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
& D > n > n \wedge I = k > 0 \wedge \\
& j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\
& \{s, j_{sa}^i, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge \\
& s > 4 \wedge s = s + k \wedge \\
& k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow
\end{aligned}$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}$$

$$\begin{aligned} & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{\infty} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{\infty} \sum_{j_i=j^{sa}+l_i-l_s}^{\infty} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_s+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{ik}+j_{ik}-j_{sa}+1)}^{\infty} \sum_{(n_{sa}=\mathbf{n}+j^{sa}+1)}^{(n_i-n_{is}-1)!} \\ & \frac{(n_{sa}-n_s-1)!}{(j_s-2)! \cdot (n_{sa}+j_s-n_{ik}-\mathbb{k}_1)!} \cdot \\ & \frac{(n_{sa}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\ & \frac{(n_{sa}-n_s-1)!}{(j^{sa}-j_s-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \end{aligned}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{\infty} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{(j_s - s)!}{(l_s - l - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}.$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n +$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \geq l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D \geq n & I = \mathbb{K} - 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \mathbb{J}_1, \dots, \mathbb{K}_1, j_{sa}^{ik}, \mathbb{K}_2, \dots, j_{sa}^s \wedge$$

$$s > 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{K}_z: z = 2 \wedge \mathbb{k} = \mathbb{K}_z \wedge \mathbb{K}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{l} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{(\mathbf{l}_s-\mathbf{l}+1)} \sum_{(j_s=\mathbf{l}_t+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\mathbf{l}_{ik}-\mathbf{l}_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j^{sa} - s - j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{(\)}$$

$$\sum_{j_{ik} = l_{ik} + \mathbf{n} - D}^{l_{ik} - \mathbf{l} + 1} \sum_{(j^{sa} = j_i + l_{sa} - l_i)}^{(\)} \sum_{j_i = l_{sa} + \mathbf{n} + s - D - j_{sa}}^{l_{sa} + s - \mathbf{l} - j_{sa} + 1}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_{sa} + j^{sa} - j_i}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - 1)!}{(\mathbf{l}_s - \mathbf{l} + 1 - l - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - l_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\)}$$

$$\sum_{l_{ik}+s-l-j_{sa}^{ik}+1}^{l_{ik}+s-l-j_{sa}^{ik}}$$

$$\sum_{j_{ik}=j^{sa}+j_i-j_{sa}}^{n} \sum_{(j^{sa}=j_i+\mathbf{l}_{sa}-l_i)}^{(n_i-j_s+1)} \sum_{j_i=\mathbf{l}_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_{ik}+s-l-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_{ik}+s-l-j_{sa}^{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

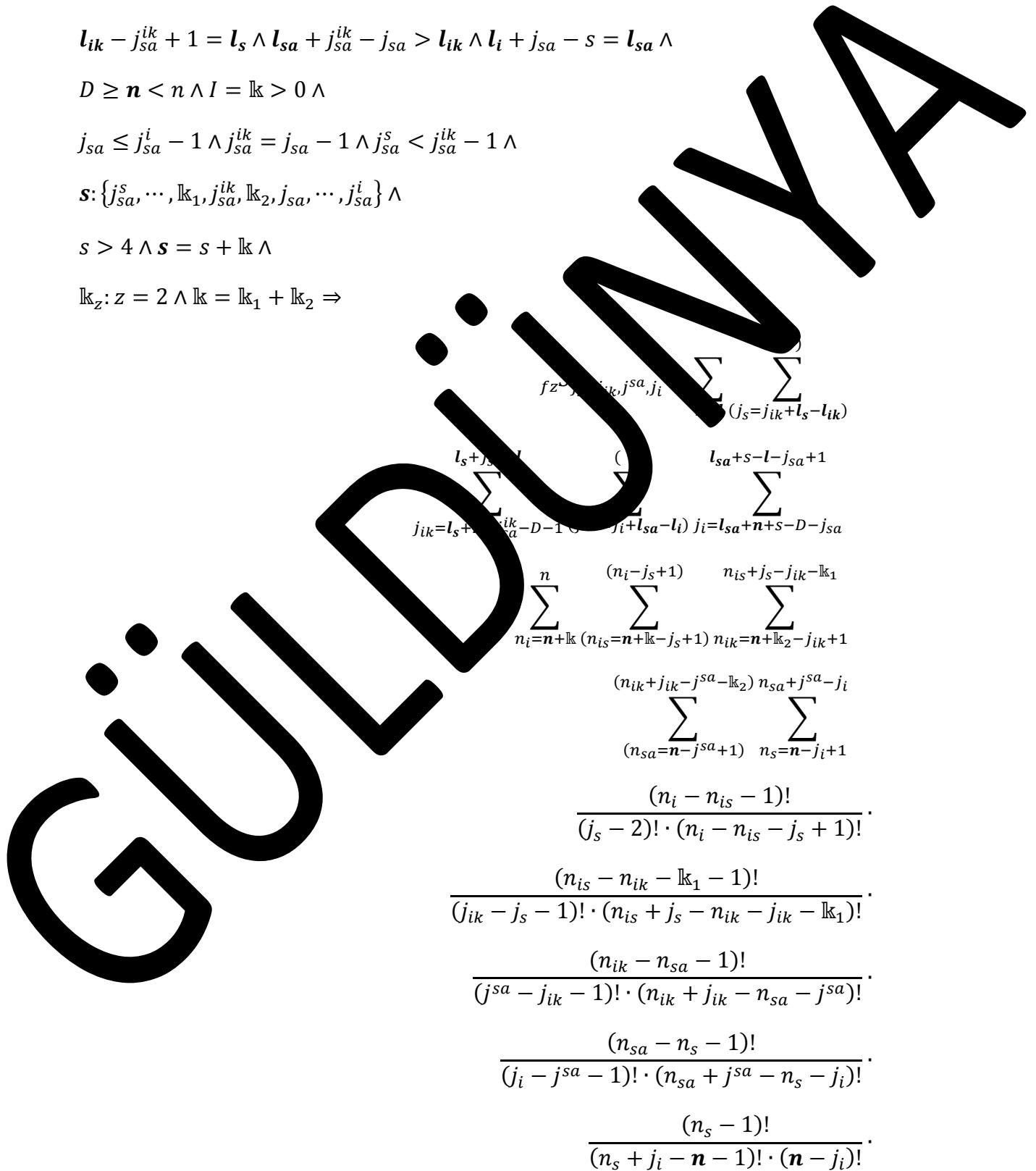
$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$



$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\infty} \sum_{\substack{() \\ (j_s=j_{ik}-l_s-l_{ik})}}^{()}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{\substack{() \\ (j^{sa}-j_i+l_{sa}-l_i) \\ (n+s-D-j_{sa})}}^{()}$$

$$\sum_{\substack{n \\ (n-i_s+1)}}^{()} \sum_{\substack{n_i=n+\mathbb{k} \\ (n+\mathbb{k}-j_s)}}^{()} n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1$$

$$\sum_{\substack{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2) \\ (n_s=n_{sa}+j^{sa}-j_i)}}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s, j_{ik}, j^{sa}, j_i)} \\
 &\quad \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j_s, j_{ik}, j^{sa}, j_i)} j_i = j^{sa} + n - l_{ik} \\
 &\quad \sum_{n+k}^{n} \sum_{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_i-j_s+1)} \sum_{j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 &\quad \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -
 \end{aligned}$$

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$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1\right)} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)} \sum_{j_i=j^{sa}+l_i-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{\left(n_i-j_s+1\right)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}-\mathbb{k}_1}^{\left(n_{is}+j_{ik}-j_{sa}-\mathbb{k}_1\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}}^{\left(n_{sa}+j^{sa}-\mathbb{k}_2\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_{ik} - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_{ik} - s - \mathbf{n} - l - \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(j_{sa}+j_{sa}^s-j_s-s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa} - 1 \wedge j_s + j_{sa}^{ik} - j_{sa} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + s > l_s \wedge l_s + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D > \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\{s, \mathbb{k}_1, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+l_i-l} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}_1-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+1}^{n_{sa}-j_{sa}-j_i} \\ & \frac{(n_i - n_{is} + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \end{aligned}$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s)!}{(l_s - l - 1)!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot \\ \frac{(D - l)!}{(D - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_i + j_{sa}^{ik} - i_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa}^{ik} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \geq l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: (\mathbb{J}_1, \dots, \mathbb{K}_1, j_{sa}^{ik}, \mathbb{K}_2, \dots, \dots, j_{sa}^s) \wedge$$

$$s > 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{K}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 \wedge \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - j_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \quad \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_{sa} + \mathbf{n} - D - j_{sa} + 1)}^{()} \\
& \quad \sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa})}^{()} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}
\end{aligned}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!}.$$

$$\frac{(D - \mathbf{l})!}{(D + j_i - \mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j^{sa} - s - j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{n} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_{sa}-l+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - \mathbf{l} - \mathbf{l} + 1) \cdot (\mathbf{l} - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - l_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{l_s} \sum_{(j_s = l_{sa} + \mathbf{n} - D - j_{sa} + 1)}^{(l_s - \mathbf{l} - 1)}$$

$$\sum_{j_{ik} = l_{ik} - l_s}^n \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{\binom{n}{2}} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{\binom{n}{2}} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, J_{ik}, j^{sa}, j_i} = \sum_{k=l \atop k \neq l}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{j_s = l_s + \mathbf{n} - D}^{l_s + s - l} \sum_{j_i = l_i + \mathbf{n} - D}^{n_i + j_s - j_{ik} - \mathbb{k}_1} \\ \sum_{i=n+\mathbb{k}}^{n} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_{is} - j_{ik} - j^{sa} + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\ \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{(\mathbf{l}_s - \mathbf{l} + 1)} \sum_{(j_s + k - l + 1) + n - D}^{(\mathbf{l}_s - \mathbf{l} + 1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + l_{ik} - 1}^{n} \sum_{(j_{sa}^{ik} = j_i + l_{sa}^{ik} - 1)}^{(\mathbf{l}_i)} j_i = l_s + s - l + 1$$

$$n_i = n - l_{ik} - l_{sa}^{ik} \quad n_{is} = n + \mathbb{k}_1 - l_{ik} - l_{sa}^{ik} \quad n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1$$

$$\sum_{a=n-j_{sa}^{ik}+1}^{n_i - j_{sa}^{ik}} \sum_{n_s = n - j_i + 1}^{n_{ik} + j_{ik} - j_{sa}^{ik} - \mathbb{k}_2} n_{sa} + j_{sa}^{ik} - j_i$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa}^{ik} - 1)! \cdot (n_{sa} + j_{sa}^{ik} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\infty} \sum_{j_i=l_i+n-D}^{l_s+s-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-\mathbb{k}_1}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s) \cdot (j_i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_s - n - j^{sa} - \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + n - l_i \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge \mathbb{k} = \mathbb{k}_1 > \mathbb{k}_2 \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{I}, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}^{\infty}$$

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\infty} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}} \\
& \frac{(n_i - l_i - 1)!}{(j_s - 2) \cdot (n_i - n_{is} + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1) \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{is} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1) \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_s + \mathbf{n} - D)}^{\infty} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\infty} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

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$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \ n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_{sa} - j_{sa}^{ik} + 1) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\left(\right.\left.\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\left.\right.\left.\right)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\sum_{(l_s+j_{sa}-l)}} \sum_{(j^{sa}=l_t+\mathbf{n}+j_{sa}-D-s)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.\left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\left.\right.\left.\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=\mathbf{l}}^{\mathbf{(}j_{ik}-j_{sa}^{ik}+1\mathbf{)}} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)} \\ \sum_{j_{ik}=\mathbf{l}_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{n_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\mathbf{)})} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{(\mathbf{)})} \\ \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{sa}=\mathbf{n}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j_{sa}-j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s) \cdot (j_{ik} - j_s - \mathbf{l}_s + 1)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l}_i)!}{(\mathbf{l}_s - n - \mathbf{k}) \cdot (n - j_i)!}.$$

$$\sum_{k=l}^{l+1} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{\substack{j_{ik} = l_{sa} + j_{sa} \\ j_{ik} = l_{sa} + l_{sa}}}^{\min(j_{ik}, l_{sa} - l - s + 1)} \sum_{j_{ik} + l_{sa} - l_{ik}}^{\left(\right)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D}^{l_s+j_{sa}^{ik}-\mathbf{l}} \sum_{j_{sa}=j_{ik}+l_{sa}-n_i}^{s-a} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}-(s-a)+j_{sa}-j_s}^{(j_i-j_{ik}+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{sa}=n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > \mathbf{e} > n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_s^{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=l}^{(l_i+\mathbf{n}-D-s)} \sum_{(j_s=l_s+n-1)}^{(l_i+\mathbf{n}-D-s)} \\
 &\quad \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-n+1)}^{()} \sum_{i_i=j^{sa}-j_{ik}-l_{sa}}^{()} \\
 &\quad \sum_{n_i=n+1}^n \sum_{(n_i-j_{ik}-j_s+1)}^{(n_i-j_{ik}-j_s+1)} \sum_{n_{is}+j_s-j_{ik}-l_{sa}}^{(n_i-j_{ik}-j_s+1)} \\
 &\quad \sum_{(n_{sa}=n-j_i+1)}^{(n_{sa}=n-j_i+1)} \sum_{n_s=n-j_i+1}^{(n_{sa}-j_i+1)} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - l_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}_1-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_1)}^{(n_{sa}=n_{is}+j_{sa}+1)} \sum_{n_{sa}=j^{sa}+l_{sa}-l_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_i - n_{is} + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1) \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j_{ik} - 1) \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{(j_i=j^{sa}+l_i-l_{sa})}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-i_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$\frac{j_s^s - s - s)!}{(l_s - l - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!}.$$

$$\frac{(D - s)!}{(D - j_i - \mathbf{n} - s + 1)! \cdot (n - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa}^{ik} \wedge j^{sa} + s - j_{sa}^{ik} \leq j_i \leq j_{sa} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge j_{sa}^{ik} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} \leq j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^i, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > \mathbb{k} \wedge s = s + \mathbb{k} \wedge$$

$$\exists z : z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_i - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik} + 1)!}{(j_s + l_{sa} - j_{ik} - l_{sa})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_s+s-l+1}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - 1)!}{(\mathbf{l}_s - \mathbf{l} + 1 - l + 1)! \cdot (l - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{sa} + 1)! \cdot (j_{ik} - n + j_{sa} - j^{ik} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right. \left.\right)} \quad$$

$$\sum_{j_{ik}=j^{sa}}^{\Delta} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right. \left.\right)} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_s+s-l}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_i-j_s+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right. \left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\right. \left.\right)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned} f_Z S_{j_s, j_{sa}, j^{sa}, j_i} &= \sum_{k=l}^{(j_s - l_s + n - D)} \sum_{i=n+k}^{(l_s + j_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(n_{ik} - j_{ik} + j_{sa} - k_1)} \\ &\quad \sum_{i=n+k}^{n} \sum_{i_s=n+k-j_s+1}^{(n_{ik} - j_{ik} + j_{sa} - k_1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\ &\quad \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\quad \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \end{aligned}$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{(\mathbf{l}_s - \mathbf{l} + 1)} \sum_{(j_s + j_{ik} - j_{sa}^{ik} + n - D)}$$

$$\sum_{j_{ik} = j^{sa} + l_{ik} - l_s}^{l_{sa} = l_s + j_{sa} - \mathbf{l}} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\begin{matrix} n \\ n_i = n - j_s \\ n_{is} = n + \mathbb{k}_1 - j_i + 1 \\ n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1 \end{matrix}$$

$$\sum_{a=n-j^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j-\mathbb{k}_2)}^{(\)} n_s=n_{sa}+j-\mathbb{k}_1$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - i_s - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_s - n - j^{sa} - i_s - n - \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s < D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge \mathbb{k} > \mathbb{k}_1 \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=n-j_i+1}^{n_{sa}+j^{sa}-} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)} \\
& \sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

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$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}} \cdot$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik} + 1)!}{(j_s + l_{sa} - j_{ik} - l_{sa} + 1) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\)} \sum_{j_i=j^{sa}+l_i-l_{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}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}}^{\mathbf{l}_{sa} + \mathbf{n} - D - j_{sa}} \sum_{(j_s = \mathbf{l}_s + \mathbf{n} - D)}^{(\mathbf{l}_{sa} + \mathbf{n} - D - j_{sa})}$$

$$\sum_{\substack{i_s = \mathbf{n} - l - j_{sa} + 1 \\ j_{ik} = \mathbf{l}_{sa} + \mathbf{n} + j_{sa}^{ik} - D - j_{sa}}}^{n} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{\left(\right)} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{\left(\right)}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s) \cdot (j_{ik} - j_s - \mathbf{l}_s + 1)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l}_i)!}{(\mathbf{l}_s - n - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=\ell_{sa}+l_{ik}-l-j_{sa}+1}^{l_{sa}+l_{ik}-l-j_{sa}+1}$$

$$\sum_{=j_s+j_{sa}}^{\ell_{sa}+l_{ik}-l-j_{sa}+1} \sum_{-j_{ik}+l_{sa}-l_{ik}}^{(\mathbf{l}_s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{(\mathbf{l}_{ik}-1)} \sum_{i=j_{sa}+n-\mathbf{k}=j_{sa}+1}^{(\mathbf{l}_s-1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{j_{sa}} \sum_{i=j_{ik}+l_{sa}-1}^{j_{sa}} \sum_{i=j_{sa}+l_i-l_{sa}}^{j_i}$$

$$\sum_{n_i=n+\mathbb{k}}^{\mathbf{n}} \sum_{n_{ik}=n+\mathbb{k}-j_{ik}}^{n-(i-1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n-(i-1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_s}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_s - j_{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - j_{sa} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} \wedge l_s > \mathbf{n} - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-1)}^{(j_{ik}-l_{sa})} \\ \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(j^{sa}=j_i+l_{sa}-n, j_{ik}=j_s+n-j_{sa})} \sum_{n_i=n+j_{ik}-l_{sa}}^{(n_i-j_s)} \sum_{n_{is}=n+j_{ik}-l_{sa}}^{(n_{is}+j_s-j_{ik}-l_{sa})} \\ \sum_{n_{sa}=n+j_{ik}-l_{sa}}^{(n_{sa}=n+j_{sa}-1)} \sum_{n_s=n-j_i+1}^{(n_s=j^{sa}-j_i)} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - l_{sa} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\ \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

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$$\sum_{k=\mathbf{l}}^{\mathbf{(l_s-l+1)}} \sum_{(j_s=l_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{} \sum_{j_i=l_s+s-l+1}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_2)}^{} \sum_{(n_{sa}=n_{is}-j_{sa}+1)}^{n_{sa}+j_{sa}-j_i} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{is}+j_s-j_{ik}-1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{ik} - j_s + 1)!}.$$

$$\frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} + n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{(l_s-l+1)}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{} \sum_{j_i=l_{ik}+s+\mathbf{n}-D-j_{sa}^{ik}}^{l_s+s-\mathbf{l}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-i_s}^{(n_i-j_s+1)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot (3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})}.$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + s - 1 \leq j_i \leq l_s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa}^{ik} = l_{ik} \wedge j_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa} - \mathbb{k}_2, j_{sa}, \dots, j_{sa}^{ik}\} \wedge$$

$$s > \mathbb{k} \wedge s = s + \mathbb{k} \wedge$$

$$\exists z : z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{\sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i)}}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

$$\frac{(\mathbf{l}_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - l - j_{sa}^{ik} + 1)!}{(j_s + l - j_{ik} - l + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\sum_{(j^{sa}=l_s+j_{sa}-l+1)}^{\sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)}}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{\sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i)}}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l} - 1)!}{(\mathbf{l}_s - \mathbf{l} + 1 - l + 1)! \cdot (l - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{sa} + 1)! \cdot (j_{ik} - \mathbf{l}_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{i_{ik}=j^{sa}+l_i-l_{sa}}^{(n_s+j_{sa}-l)} \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{(n_s+j_{sa}-l)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_s+n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, J_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=n-D}^{l_s+j_{sa}^{ik}-l} \left(\sum_{(j^{sa}, j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \right)$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s+j_{sa}^{ik}+n-D)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-l+1}^{l_{ik}-l+1} \quad \quad \quad j_{sa}=j_{ik}+l_{sa}-n_i \quad \quad \quad j_i=j^{sa}+l_i-l_{sa}$$

$$n_i = n + \mathbb{k}_1 \quad n_{is} = n + \mathbb{k}_2 - j_{ik} - \mathbb{k}_1 \quad n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1$$

$$n_{sa} = n + j_{ik} - j_{sa}^{ik} - \mathbb{k}_2 \quad n_{si} = n + j^{sa} - j_i$$

$$\sum_{a=n-j_{sa}+1}^{n_i} \quad \quad \quad \sum_{s=n-j_i+1}^{n_{ik}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\begin{aligned} & \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\infty} \sum_{j_i=j^{sa}+l_i-1}^{\infty} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-\mathbb{k}_1}^{n_i-j_s+1} \\ & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j_{sa}-\mathbb{k}_1}^{n_i-j_s+1} \\ & \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - \mathbf{n} - \mathbb{k} - \mathbb{k}_1 - j_{sa})!} \cdot \\ & \frac{1}{(j_{sa} - j_s + 1)!} \cdot \\ & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \end{aligned}$$

$$\begin{aligned} & D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D \geq \mathbf{n} < n \wedge \mathbb{k} = \mathbb{k}_1 > \mathbb{k}_2 \wedge \\ & j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\ & s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge \\ & s > j_{sa}^s = s + \mathbb{k} \wedge \\ & \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow \end{aligned}$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_{ik}+\mathbf{n}-D-j_{sa}^{ik})} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}^{\infty}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{} \sum_{n_l=n+\mathbb{k}}^n$$

$$\sum_{n_{is}=n+\mathbb{k}-j_s+1}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{sa}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{} \sum_{n_l=n+\mathbb{k}}^n$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\substack{n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_{sa} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j^{sa}-j_{ik}-l_{sa}+l_{ik})} \sum_{(j_s=j_{ik}+l_{sa}-l_{ik})}^{(j_s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(j_i)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i - 1)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=\mathbf{l}}^{(l_s - l + 1)} \sum_{(j_s = l_s + n - D)}^{(l_s - l + 1)}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}}^n \sum_{(j_{sa} = j_i + l_{sa} - l_i)}^{\left(\right)} \sum_{j_i = l_i + n - D}^{l_i - l + 1}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n - j_{sa} + 1)}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j_{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - \mathbf{l}_s + 1)!}.$$

$$\frac{(D - l_i)!}{\mathbf{n} - l_i \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{l_i=l}^{\mathbf{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{l_s+s-l}$$

$$\sum_{j_{ik}=j}^n \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\binom{\mathbf{n}}{2}} \sum_{j_i=l_i+\mathbf{n}-D}^{l_s+s-l}$$

$$\sum_{l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\sum_{i=1}^{l_s+s-l}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{\mathbf{n}}{2}} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\sum_{i=1}^{l_s+s-l}}$$

$$\frac{3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=n+j_{sa}-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \sum_{\substack{n \\ n_i=n+k \\ n_{is}=n+k-j_s+1}} \sum_{\substack{(n_i-k+1) \\ (n_{ik}+j_{ik}-j^{sa}-k_2)}} \sum_{\substack{n_{is}+j_s-j_{ik}-k_1 \\ (n_{ik}+j_{ik}-j^{sa}-k_2)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ (n_{sa}=n-j^{sa}+1)}} \sum_{\substack{n_s=n-j_i+1 \\ n_s=j_i+1}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\binom{\mathbf{n}}{\mathbf{k}}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{\mathbf{n}}{\mathbf{k}}} \sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{\sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s, j^{sa}=j_{sa}-l_{sa})}^{(l_s+j_{sa}-l)}} \sum_{n_i=\mathbf{n}+\mathbb{k}-(n_{ik}-j_{ik}+j_{sa}-j_i)}^n \sum_{n_{ik}=n_{sa}+j_{sa}-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \\ \sum_{(n_{sa}=n_{sa}+j_{ik}-j^{sa}, n_s=n_{sa}+j^{sa}-j_i)}^{n_{sa}-j_{ik}+j^{sa}} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n_s=n_{sa}+j^{sa}-j_i} \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_s - n_{sa} - j^{sa} - s - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 2 \cdot j_s - n_s - n_{sa} - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge \\ D + \mathbf{l}_s + s - \mathbf{l}_i - j_s - \mathbf{l}_s + j_{sa}^i \leq l \leq D - \mathbf{n} + 1 \wedge \\ 2 \leq j_s \leq j_{sa}^{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ j_{ik} + j_{sa} - j_{sa}^s \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ \mathbf{l}_{ik} - j_{sa}^s + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=n+\mathbb{k}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-\mathbb{l}_1-1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}-1)}^{n_{is}+j_s-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-1)} \sum_{(n_{sa}+j^{sa}-j_i)}^{n_{sa}+j^{sa}-j_i} \frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_{i-s}-n_{is}-j_s+1)!}.$$

$$\frac{(n_{is}-n_{i-s}-\mathbb{k}_1-1)!}{(n_{i-s}-j_s-1)! \cdot (n_{i-s}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n+\mathbb{k}-j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - \mathbb{k} - l_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - l_1 - j_{sa})!}.$$

$$\frac{1}{(n + \mathbb{k} - j_s - s)!}$$

$$\frac{(l_s - l + 1)!}{(l_s - j_s - l + 1) \cdot (j_s - 2)!}.$$

$$\frac{(n - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + s \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq \mathbb{k} \wedge D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - \mathbb{k} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > \mathbb{k} \wedge l_{sa} + j_s - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > \mathbb{m} \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \mathbb{k}_1, j_{sa}^{lk}, \mathbb{m}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = \mathbb{m} + \mathbb{k} \wedge$$

$$\mathbb{m} \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{()} l_{sa+s-l-j_{sa}+1}$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{i=j-n-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_{sa}-j^{sa})!}{(j^{sa}-j_{ik}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}.$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=l}^{()} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{()} l_{s+s-l}$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - l)^!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l + 1)!}{(D + j_{ik} - \mathbf{n} - l_i)! \cdot (l_i - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - l_{ik} \wedge l_i - j_{sa} - s = j_i \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^i < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \neq 4 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_{z+1} = 2 \wedge \mathbb{k} = \mathbb{k}_1 - \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=\mathbf{l}_s+n-D)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{n} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_t=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_{sa} - j_{sa}^{ik} + 1) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^n \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-l)} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_s+j_{sa}-l)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - l_i - 1)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$${}_{fz}S_{j_s \ , j_{ik}, j^{sa}, j_i} = \sum_{k=\mathbf{l}}^{\mathbf{(}l_s-\mathbf{l+1}\mathbf{)}} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}^{(l_s-\mathbf{l+1})}$$

$$\sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{i_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{()}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - \mathbf{l}_s + 1)!}.$$

$$\frac{(D - l_i)!}{\mathbf{n} - \mathbf{l}_i + (n - j_i)!}$$

$$\sum_{l_{sa}}^{\mathbf{l}_s} \sum_{(j_s=j_{ik}-j_{sa}+1)}^{l_{ik}-l}$$

$$\sum_{j_{ik}=l_{sa}+j_{sa}^{ik}-D}^{l_{sa}^{ik}-l} \sum_{(j_i=j_{ik}+l_{sa}-l_{ik})}^{n} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{n}$$

$$\frac{3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(2 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s, \mathbf{j}_i, \mathbf{j}_{sa}, j_i} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}^{j_{ik}+s-l-j_{sa}^{ik}+1} \sum_{i_l=j_{ik}, i_s=j_{sa}, i_a=j_i}^{n_{is}=n+\mathbb{k}-j_s+1} \sum_{n_{ik}=\mathbf{n}+s-D-j_{sa}^{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \quad n_{sa}+j^{sa}-j_i} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\ \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\ \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\ \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\ \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{\substack{j_{ik}=j^{sa}+l_{ik}-l_{sa} \\ (j_{ik}-l_{ik})+l_{sa}-l_i=j_l}}^{\sum_{k=l}^{\mathbf{l}_s} (j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{\substack{n_i=n+\mathbb{k} \\ n_i=n+\mathbb{k}-j_s \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ (n_{ik}-n_{ik})+n_{is}-n_{sa}-\mathbb{k}_2=n_s \\ n_{sa}=n_{ik}-j_{ik}-j_{sa}-\mathbb{k}_2 \\ n_s=n_{sa}+j^{sa}-j_i \\ (3 \cdot n_{is}+2 \cdot j_s-n_{sa}-n_s-j^{sa}-j_i-s-2 \cdot \mathbb{k}-\mathbb{k}_1)! \\ (3 \cdot n_{is}+2 \cdot j_s-n_{sa}-n_s-j^{sa}-j_i-\mathbf{n}-2 \cdot \mathbb{k}-\mathbb{k}_1-j_{sa}^s)!}}^{\sum_{s+n-D-j_{sa}^{ik}}^{l_s} \sum_{\substack{(j_s-j_{sa}^{ik}+1) \\ (j_s-j_{sa}^{ik})+n_{sa}-j_{sa}^s=n_s \\ (n_{sa}-j_{sa}^s)+j^{sa}-j_i=n_s \\ (n_{sa}-j_{sa}^s)+j^{sa}-j_i=s+n-D-j_{sa}^{ik}}}}$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$D + \mathbf{l}_s + s - \mathbf{n} - \mathbf{l}_i + 1 \leq \mathbf{l} \leq D - \mathbf{n} + 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, l_{ik}, j^{sa}, j_i} = & \sum_{k=l}^{l_s} \sum_{(j_s = l_s + n - D)}^{(l_s - l + 1)} \\
& \sum_{j_{ik} = j^{sa} + l_{ik} - l_{sa}}^{(l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1)} \sum_{(j^{sa} = l_{ik} + n + j_{sa} - j_{sa}^{ik})}^{(n_i - j_s + 1)} j_i = j^{sa} + l_{ik} - l_{sa} \\
& \sum_{n_{is} = n + \mathbb{k} (n_{is} = l_{ik} - j_s + 1)}^{n} n_{ik} = n - j_{sa} + 1 \\
& \sum_{n_{ik} = n - j^{sa} + 1}^{(n_{ik} + j_{sa} - l^{sa} - \mathbb{k}_2)} n_{sa} + j^{sa} - j_i \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+l_i-l}^{\infty} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_1}^{\infty} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}}^{\infty} \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - l_i - s - l - \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - s - l - \mathbf{n} - \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot \\
& \frac{1}{(j_{sa}^s - j_s - s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \\
& D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge \\
& D + l_s + s - \mathbf{n} - l_i + 1 \leq l \leq D - \mathbf{n} + 1 \wedge \\
& 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} - 1 \wedge j_s + j_{ik} - j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
& j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_{sa} + j_{sa}^{ik} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\
& l_{ik} - j_{sa}^{ik} + s = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
& D > \mathbf{n} \wedge I = \mathbb{k} > 0 \wedge \\
& j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\
& \{s, j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge \\
& s > 4 \wedge s = s + \mathbb{k} \wedge \\
& \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow
\end{aligned}$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{l_{ik}-l+1} \sum_{(j_s=l_s+n-D)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i-\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2} \\ & \frac{(n_{ik}+j_{ik}-\mathbb{k}_2) \cdot n_{sa} \cdot j^{sa}-j_i}{(n_{sa}=n_{is}+1) \cdot n_s=n-j_s-1} \\ & \frac{(n_i-n_{ik}-1)!}{(j_s-2) \cdot (n_i-n_{ik}-j_s+1)!} \cdot \\ & \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\ & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\ & \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\ & \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \\ & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\ & \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\ & \sum_{k=l}^{l_s+j_{sa}^{ik}-l} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \end{aligned}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{} \sum_{n_s=n_{sa}+j^{sa}-i_s} \\
 & \quad \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1) \cdot (D - l - s)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa})!} \cdot \\
 & \quad \frac{(l_s - l - 1)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!} \cdot \\
 & \quad \frac{(D - l - s)!}{(D - l_i - n - s + j_i - n)! \cdot (n - j_i)!}
 \end{aligned}$$

$$\begin{aligned}
 & D \geq n < n \wedge l_s > D - n + 1 \wedge \\
 & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{il} \leq j^{sa} + j_{sa}^{ik} - s \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - j_{sa}^{ik} + s - 1 \leq j_i \leq l_i \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa}^{ik} > l_{ik} \wedge j_{sa} - s > l_{sa} \wedge
 \end{aligned}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$\begin{aligned}
 & j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} \leq j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\
 & s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa} - \mathbb{k}_2, j_{sa}, \dots, j_{sa}^{ik}\} \wedge
 \end{aligned}$$

$$s > \mathbb{k} \wedge s = s + \mathbb{k} \wedge$$

$$\exists z: z = z \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j^{sa} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_{ik}+s-l-j_{sa}^{ik}+2}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(\mathbf{n} - \mathbf{l} - 1)!}{(n_s + l_i - \mathbf{n} - \mathbf{l} - 1)! \cdot (j_s - j_i)!} \cdot$$

$$\frac{(l_{ik} + l_{sa} - j^{sa} - l_{ik})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(l_i + l_{sa} - l_{sa} - s)!}{(l_i + l_{sa} - l_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{ik}+s-\mathbf{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\varsigma_{i_c, i_s, i_k, l_s, l_i, j_i} = \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{i_k=l_s+n+j_{sa}^{ik}-D-1}^{r_a+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_s+s-\mathbf{l}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{sa} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - j_{sa})!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_{sa} - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l}_i)!}{(\mathbf{l}_s - n - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{l=s}^{l_s+j_{sa}^{ik}-l} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{l_{sa}-l+1} l_i-l+1$$

$$\sum_{=l_s+n+j_{sa}^{ik}-l}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_{sa}-l+1} \sum_{j_i=l_s+s-l+1}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{j_{ik}=n+\mathbb{k} \\ j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\substack{j^{sa}=j_i+j_{sa}-s \\ j^{sa}=j_{sa}+j^{sa}-j_i}} \sum_{\substack{j_s=j_{ik}+l_s-l \\ j_s=j_{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\substack{() \\ l_s+s-l}}$$

$$\sum_{\substack{n=\mathbb{k} \\ n=n+\mathbb{k}}}^n \sum_{\substack{() \\ n_{is}=n+j_i-j_s+1}} \sum_{\substack{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ ()}} \sum_{\substack{() \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i \\ n_s=n_{sa}+j^{sa}-j_i}}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_i - n_s - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(n_{is} + 3 \cdot j_s - n_s - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s, j_{ik}, l_s, l_{ik})} \frac{\binom{n}{l}}{\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{l_i+n+j_{sa}-D-s-1}{(j^{sa}+j_{sa}^{ik}-n-D)}} \cdot \frac{\binom{n_i-j_s+1}{n+k} \cdot \binom{n_i+j_s-j_{ik}-\mathbb{k}_1}{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \cdot \binom{n_{sa}+j^{sa}-j_i}{n_s=n-j_i+1}}{\binom{(n_i-n_{is}-1)!}{2! \cdot (n_i-n_{is}-j_s+1)!}} \cdot \\ \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\ \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\ \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\ \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\ \frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!} \cdot \\ \frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\ \frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

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$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_{ls}=s^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+i_s-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+i_k-1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+j_{sa}-1)}^{(n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2)} \sum_{j_{ls}=n-j_i+1}^{n_{sa}+j^{sa}-s}$$

$$\frac{(-n_{is}-1)!}{(s-2)! \cdot (s-n_{is}-j_s+1)!}.$$

$$\frac{(n_{is}-n_{is}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_i}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}_1-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_1)}^{(n_{sa}=n-sa+1)} \sum_{n_s=n-j_i}^{n_{sa}-j_i}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!} \cdot$$

$$\frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^{\infty}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\infty} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{\infty} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{is}+j^{sa}-j_i}^{\infty}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - \mathbb{k} - l_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{m}_1 - l_{sa})!}.$$

$$\frac{1}{(\mathbf{n} + \mathbb{k} - j_s - s)!}$$

$$\frac{(l_s - l + 1)! \cdot (j_s - 2)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(-l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + \mathbb{k} \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{m} > 0 \wedge$$

$$j_{sa} \leq j_i - 1 \wedge j_{sa}^{ik} = j_i - 1 \wedge j_{sa}^i < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{m}, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s > j_{sa}^i \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge z = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(D - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot \\
& \quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \quad \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 \\
& \quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} + \\
& \quad \sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\)} \\
& \quad \sum_{j_{ik}=\mathbf{l}_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\mathbf{l}_i+n+j_{sa}-D-s)}^{(\mathbf{l}_s+j_{sa}-l)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1} \\
& \quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}+j^{sa}-j_i)}} \sum_{n_s=\mathbf{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j_i - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j^{sa} - \mathbf{l}_{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} - \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_s+\mathbf{n}+j_{sa}^{ik}-D-1}^{l_s+j_{sa}^{ik}-\mathbf{l}} \sum_{(j^{sa}=l_s+j_{sa}-\mathbf{l}+1)}^{(\mathbf{l}_{sa}-\mathbf{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-\mathbf{l}+1}$$

$$\sum_{n_l=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}-j^{sa}+1)}}^{\sum_{(n_{sa}+j^{sa}-j_i)}} \sum_{n_s=\mathbf{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + l - n - 1)! \cdot (n_s - j_i)!} \cdot$$

$$\frac{(\mathbf{n} - l - 1)!}{(l_s - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + l_s - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\mathbf{n}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{(\)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{n} \sum_{(j^{sa} = l_i + \mathbf{n} + j_{sa} - D - s)}^{(l_s + j_{sa} - l)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\)} \sum_{n_s = n_{sa} + j^{sa} - j_i}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{i_c, i_s, i_a, j_l} = \sum_{k=l}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-\mathbf{l}_s)}^{(\left.)\right.} \\ \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_{sa}-\mathbf{l}+1)} \sum_{j_l=l_i+\mathbf{n}-D}^{l_i-\mathbf{l}+1} \\ \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i}^{n_{sa}+j^{sa}-j_i} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - \mathbf{l} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - j_{sa})!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_{sa} - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l}_i)!}{(\mathbf{l}_s - n - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{i=l}^{\mathbf{n}} \sum_{\substack{j_s = j_{ik} + l_s - \mathbf{l}_s \\ j_{ik} + j_{sa} - n + j_{sa}^{ik}}}^{\mathbf{l}_i - l + 1} \sum_{\substack{j_{ik} + j_{sa} - j_{sa}^{ik} \\ j_{ik} + j_{sa} - j_{sa}^{ik}}}^{\mathbf{l}_i - l + 1} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i - l + 1}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{\substack{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1) \\ n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{sa} = \mathbf{n} - j^{sa} + 1)}}^{n_{sa} + j^{sa} - j_i} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{is} + j_s - \mathbf{l}_s - \mathbb{k}_1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\mathbf{i}=\mathbf{l}}^{\mathbf{l}_{ik}-\mathbf{l}+1} \sum_{(j_s=j_{ik}+l_s-s)}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_s-j_{sa})}^{l_{ik}-l+1} \sum_{(j_{sa}=j_{ik}+j_{ik}-j^{sa}-\mathbf{k}_1)}^{l_{ik}-l+1} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{l_{ik}-l+1}$$

$$\sum_{\mathbf{i}=\mathbf{l}_i+\mathbf{n}+j_{sa}-s}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{sa}+j_s-j_{sa})}^{l_{ik}-l+1} \sum_{(j_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2)}^{l_{ik}-l+1} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{l_{ik}-l+1}$$

$$\sum_{\mathbf{i}=\mathbf{n}+\mathbf{k}}^n \sum_{(n_{is}=n+\mathbf{k}-j_s+1)}^{l_{ik}-l+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbf{k}_1)}^{l_{ik}-l+1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2)}^{l_{ik}-l+1} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{l_{ik}-l+1}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_i - n_{is} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbf{k} - \mathbf{k}_1)!}{(n_{is} + 3 \cdot j_s - n_{is} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbf{k} - \mathbf{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{l_t+n+j_{sa}^{ik}-D-s-1} \sum_{(j_s, j_{ik}+l_s-l_{ik})}^{\binom{n}{l}} \sum_{j_i=l_t+n-D}^{l_t+1} \sum_{n_s=n-j_i+1}^{n} \sum_{n_{ik}=n-j_{sa}+1}^{n_i-j_s+1} \sum_{n_{is}=n-k-j_s+1}^{n_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{sa}-\mathbb{k}_1} \sum_{n_a=n-j_{sa}+1}^{n_i-j_s+1} \frac{(n_i - n_{is} - 1)!}{(n_{is} - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ \frac{(\mathbf{l}_s - l - 1)!}{(\mathbf{l}_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=\mathbf{l}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_{ls}=l_s+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+j_{is}-1+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+j_{ik}-\mathbb{k}_1+1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{sa}+j^{sa}-s)}$$

$$\frac{(n_{is}-n_s-1)!}{(s-2)! \cdot (s-n_{is}-j_s+1)!}.$$

$$\frac{(n_{is}-n_s-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-\mathbf{l}-1)!}{(\mathbf{l}_s-j_s-\mathbf{l}+1)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-l} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\)} \sum_{j_i=j^{sa}+s-j_{sa}^{ik}}^{(\)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-k_1}^{(\)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(\)} \sum_{n_s=n_{sa}+j_{sa}^s}^{(\)}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j_{sa}^s - s - k - k_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - l_i - n_{ik} - j_{ik} - j_{sa}^s - j_{sa})!}.$$

$$\frac{1}{(j_{sa}^s - j_s - s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa}^{ik} - 1 \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge k > k \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > j_{sa} = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
& \sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=n-j_i+1}^{n_{sa}+j^{sa}} \\
& \frac{(n_i-l_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-l+1)} \\
& \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{l_i-l+1} j_i=j^{sa}+s-j_{sa}
\end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_s+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{l}_i + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(l_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{l}_{ik}-\mathbf{l}-j_{sa}^{ik}+2} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)}^{()}$$

$$\sum_{j_{ik}=j_s+\mathbf{l}_{ik}-\mathbf{l}_s}^{n} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - l)^!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l)^!}{(D + j_{ik} - \mathbf{n} - l_i)^! \cdot (l_i - j_i)^!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{is} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > j_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} - s \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s > 4 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_{\mathbb{A}} z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=l}^{(l_i+\mathbf{n}-D-s)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{n} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=n+j^{sa}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n_s - j_i)!} \cdot$$

$$\frac{(n - l - 1)!}{(l_s - l - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{\infty} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{n} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_i+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=\mathbf{l}}^{\mathbf{l}_s - \mathbf{l} + 1} \sum_{(j_s = l_i + \mathbf{n} - D - s + 1)}^{(l_s - l + 1)}$$

$$\sum_{j_{ik} = s + l_{ik} - l_s}^n \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{\left(\right)} \sum_{j_i = j^{sa} + s - j_{sa}}^{()}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{n_{ik}}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{\left(\right)} \sum_{n_s = n_{sa} + j^{sa} - j_i}^{()}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{sa} - n_s - j^{sa} - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!} \cdot$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l} - 1)!}{(\mathbf{l}_s - j_s - \mathbf{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + s - n - l_i + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{(j_s=j_{ik}+l_s-l_{ik})} \sum_{(j^{sa}=l_{sa}+n-D)}$$

$$\sum_{j_{ik}=l_{ik}-l+1}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(\mathbf{j}_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot \dots \cdot (n - j_i)!}$$

$$\sum_{k=l} \sum_{(j_s=j_{ik}+l_s)}$$

$$j_{ik} = j^{sa} + i - j_{sa} \quad (j^{sa} < j_{sa} - s) \quad j_i = i - n - D$$

$$\sum_{n+\mathbb{k}_1}^n (n_{is}-n_{ik}) \sum_{j_s+1)}^{j_s+1) } n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1$$

$$(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \sum_{n_s=n_{sa}+j^{sa}-j_i}^{})$$

$$\frac{(3 \cdot n_{is} + \omega^i - n_s - n_s - j^{sa} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(n_{is} + 3 \cdot j_s - \omega^i - n_s - j^{sa} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}.$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

DİZİN

B

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumu simetrinin son durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık,

2.3.3.1.1.1.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.2.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumu simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.1/230-231

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.1.1/187-188

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.1.1.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.2.1/230-231

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.2.1/187-188

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.1.2.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumu bağımlı simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.2.1/230-231

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.3.1/187-188

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.1.3.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumu simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.4.1.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.4.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.1.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.4.2.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.4.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.1.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumu bağımlı simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.4.3.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.4.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.1.1.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumu

simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.1.1/233

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.1.1/190

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.2.1/233

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.2.1/190

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.3.1/233

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.3.1/190

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.6.1.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.6.1.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.6.2.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.6.2.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu

bağımlı simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.1.6.3.1/3-4

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.6.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.6.3.1/3-4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin son durumuna bağlı

tek kalan simetrik olasılık,
2.3.3.1.1.1.1/1

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.1/80

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1/1

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin son durumuna bağlı

tek kalan simetrik olasılık,
2.3.3.1.1.2.1/118

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.2.1/80-81

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin son durumuna bağlı

tek kalan simetrik olasılık,
2.3.3.1.1.3.1/118

tek kalan düzgün simetrik olasılık,
2.3.3.2.1.1.3.1/80-81

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.1.1.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.1.1.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.1.2.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.1.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.1.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.1.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
simetrinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.2.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.2.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.2.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.2.2.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.2.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.2.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.2.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.2.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.2.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
simetrinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.4.1.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.4.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımsız simetrinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.4.2.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.4.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.4.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.4.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.6.1.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.6.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.6.2.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.6.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımlı simetrinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.6.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.6.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
simetrinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.7.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.7.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.7.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
bağımsız simetrinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.7.2.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.7.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.7.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrinin ilk ve son durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.2.7.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.2.7.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.2.7.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrinin ilk
ve herhangi bir durumun bulunabileceği
olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.1.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.1.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrinin ilk ve herhangi bir durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.1.2.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.1.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrinin ilk ve herhangi bir durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.1.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.1.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrinin ilk ve herhangi bir
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.2.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.2.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.2.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrinin ilk ve herhangi bir
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.2.2.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.2.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.2.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrinin ilk ve herhangi bir durumuna bağlı
durumun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.3.2.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.3.2.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.3.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrinin
herhangi iki durumuna bağlı

tek kalan simetrik olasılık,
2.3.3.1.4.1.1.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.4.1.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.4.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrinin herhangi iki durumuna bağlı

tek kalan simetrik olasılık,
2.3.3.1.4.1.2.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.4.1.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.4.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrinin herhangi iki durumuna bağlı

tek kalan simetrik olasılık,
2.3.3.1.4.1.3.1/4

tek kalan düzgün simetrik olasılık,
2.3.3.2.4.1.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.4.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrinin ilk
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.4.1.1.1/839-840

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrinin ilk durumunun bulunabileceği
olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.4.1.2.1/839-840

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrinin ilk durumunun bulunabileceği
olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.4.1.3.1/839-840

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrinin ilk
ve herhangi iki durumunun bulunabileceği
olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.5.1.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.5.1.1.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.5.1.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrinin ilk ve herhangi iki durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.5.1.2.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.5.1.2.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.5.1.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrinin ilk ve herhangi iki durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.5.1.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.5.1.3.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.5.1.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
simetrinin ilk ve herhangi iki durumunun
bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.5.2.1.1/6

tek kalan düzgün simetrik olasılık,
2.3.3.2.5.2.1.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.5.2.1.1/10

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrinin ilk ve herhangi iki
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.5.2.2.1/6

tek kalan düzgün simetrik olasılık,
2.3.3.2.5.2.2.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.5.2.2.1/10

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrinin ilk ve herhangi iki
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.5.2.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.5.2.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.2.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.1.1.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.1.2.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.1.3.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.2.1.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.2.2.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki

durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.8.2.3.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.1.1.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.1.2.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.1.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.2.1.1/6

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.2.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.2.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.2.2.1/6

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.2.2.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.2.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.2.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.2.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
simetrinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.4.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.4.1.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.4.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımsız simetrinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.4.2.1/6

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.4.2.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.4.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bir bağımsız durumlu
bağımsız simetrinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.4.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.4.3.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.4.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.6.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.6.1.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.6.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.6.2.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.6.2.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.6.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.3.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
simetrinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.7.1.1/6

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.7.1.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.7.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
bağımsız simetrinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.7.2.1/6

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.7.2.1/4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.7.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımsız durumlu
bağımlı simetrinin ilk herhangi bir ve son
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.6.7.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.6.7.3.1/3-4

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.6.7.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrinin ilk
herhangi bir ve son durumunun
bulunabilecegi olaylara göre herhangi bir
ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.1.1.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.1.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrinin ilk herhangi bir ve son
durumunun bulunabilecegi olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.1.2.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.1.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrinin ilk herhangi bir ve son
durumunun bulunabilecegi olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.1.3.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.1.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrinin ilk herhangi bir ve son
durumunun bulunabilecegi olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.2.1.1/11

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.2.1.1/11

şümle bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımsız simetrinin ilk herhangi bir ve son
durumunun bulunabilecegi olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.2.2.1/11

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.2.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımsız-bağımlı durumlu
bağımlı simetrinin ilk herhangi bir ve son
durumunun bulunabilecegi olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.2.3.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.2.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrinin ilk herhangi bir ve son
durumunun bulunabilecegi olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.4.1.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.4.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımlı simetrinin ilk herhangi bir ve son
durumunun bulunabilecegi olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.4.2.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.4.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımlı simetrinin ilk herhangi bir ve son
durumunun bulunabilecegi olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.4.3.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.4.3.1/11

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
simetrinin ilk herhangi bir ve son
durumunun bulunabilecegi olaylara göre
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.6.1.1/7

tek kalan düzgün olmayan simetrik
olasılık, 2.3.3.3.9.6.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı-bağımsız durumlu
bağımsız simetrinin ilk herhangi bir ve son

durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.6.2.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.6.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.6.3.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.6.3.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.7.1.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.7.2.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,
2.3.3.1.9.7.3.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.3.1/7-8

şümlü bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.7.1.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.7.1.2.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.1.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.1.7.1.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.1.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.1.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.7.2.1.1/7

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.2.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.7.2.2.1/7

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.2.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,
2.3.3.1.7.2.3.1/5

tek kalan düzgün simetrik olasılık,
2.3.3.2.7.2.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.4.1.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.4.2.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.4.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.6.1.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.6.2.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.6.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.7.1.1/7

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.7.2.1/7

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.7.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.1.1.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.1.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.1.2.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.2.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.1.3.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.3.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.2.1.1/15-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.1.1/16

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

tek kalan simetrik olasılık, 2.3.3.1.10.2.2.1.1/5-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.2.3.1/9-10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.3.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi iki ve son

durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.4.1.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.4.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.4.3.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.3.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.6.1.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.6.2.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.6.3.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.3.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.7.1.1/15-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.7.2.1/15-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.7.3.1/9-10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.3.1/9-10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.1.2/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son

durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.1.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.3.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.1.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.2.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.3.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.2.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.3.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.2.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.3.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.1.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son

durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.2.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.3.1/10-11

VDOİHİ’de Olasılık ve İhtimal konularının tanım ve eşitlikleri verilmektedir. Ayrıca VDOİHİ’de olasılık ve ihtimalin uygulama alanlarına da yer verilmektedir. VDOİHİ konu anlatım ciltleri ve soru, problem ve ispat çözümlerinden oluşmaktadır. Bu cilt bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz olasılık dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımin ilk bağımlı durumu hariç dağılımin başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımin aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılığın tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrik ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık kitabında, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu hariç olasılıklı dağılımin ilk bağımlı durumu hariç dağılımin başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımin aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılığın, tanım ve eşitlikleri verilmektedir.

VDOİHİ’nin diğer ciltlerinde olduğu gibi bu ciltte de verilen ana eşitlikler, olasılık tablolarından elde edilen verilerle üretilmiştir. Diğer eşitlikler ise ana eşitliklerden teorik yöntemle üretilmiştir. Eşitlik ve tanımların üretilmesinde dış kaynak kullanılmamıştır.

gündem