

VDOİHİ

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

Cilt 2.3.2.3.7.1.1.764

İsmail YILMAZ

2023

**Matematik / İstatistik / Olasılık**

**ISBN: 978-625-424-726-2**

© 1. e-Basım, Mayıs 2023

**VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık Cilt 2.3.2.3.7.1.1.764**

*İsmail YILMAZ*

Copyright © 2023 İsmail YILMAZ

Bu kitabın (cildin) bütün hakları yazara aittir. Yazarın yazılı izni olmaksızın, kitabın tümünün veya bir kısmının elektronik, mekanik ya da fotokopi yoluyla basımı, yayımı, çoğaltımı ve dağıtımı yapılamaz.

## **KÜTÜPHANE BİLGİLERİ**

**Yılmaz, İsmail.**

**VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık-Cilt 2.3.2.3.7.1.1.764 / İsmail YILMAZ**

*e-Basım, s. XXV + 841*

*Kaynakça yok, dizin var*

*ISBN: 978-625-424-726-2*

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

*Dili: Türkçe + Matematik Mantık*



Türkiye Cumhuriyeti Devleti  
Kuruluşunun  
100.Yılı Anısına



*M. Atatürk*

## DÜZELTME

Bu cilt için

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

simgesi yerine

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

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

**Veri Değişkenleri Olasılık ve İhtimal Hesaplama İstatistiği (VDOİHİ)** ile olasılık ve ihtimal yasa konumuna getirilmiştir.

VDOİHİ’de Olasılık;

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

*Sanırım bilgi ve teknolojideki kaderimiz veriyle ilişkilendirilmiş.*

## İÇİNDEKİLER

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar .....	1
Simetriden Seçilen Dört Duruma Göre İlk Düzgün Olmayan Simetrik Olasılık .....	3
Dizin .....	8

**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

**l<sub>i</sub>:** 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<sub>i</sub>:** simetrinin son bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası. Simetrinin birinci bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlardaki sırası

**l<sub>s</sub>:** simetrinin ilk bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz

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

**l<sub>ik</sub>:** 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<sub>sa</sub>:** 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<sub>i</sub>:** simetrinin son bağımlı durumunun, bağımlı olasılıklı dağılımlarda bulunabileceği olayların, son olaydan itibaren sırası

**j<sub>sa</sub><sup>i</sup>:** simetriyi oluşturan bağımlı durumlar arasında simetrinin son bağımlı durumunun bulunduğu olayın, simetrinin son olayından itibaren sırası ( $j_{sa}^i = s$ )

**j<sub>ik</sub>:** simetrinin ikinci olayındaki durumun, gelebileceği olasılık dağılımlardaki 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

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

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

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

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

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

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

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

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

$f_z S_{j,sa,D}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin durumuna bağlı ilk simetrik olasılık

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

$f_z S_{j,s,j_i,0}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

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

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

$f_z S_{j,s,j_i,0}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı

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

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

${}^0 S_{j_s,j_i}^{IS}$ : 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 ilk simetrik olasılık

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

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

$f_z S_{j_s,j^{sa}}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre ilk simetrik olasılık

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

durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$f_z S_{j_s, j^{sa}, D}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$f_{z,0} S_{j_s, j^{sa}}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$f_{z,0} S_{j_s, j^{sa}, 0}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$f_{z,0} S_{j_s, j^{sa}, D}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$f_z S_{j_{ik}, j^{sa}}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin herhangi iki durumuna bağlı ilk simetrik olasılık

$f_z S_{j_{ik}, j^{sa}, 0}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin herhangi iki durumuna bağlı ilk simetrik olasılık

$f_z S_{j_{ik}, j^{sa}, D}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin herhangi iki durumuna bağlı ilk simetrik olasılık

$f_z S_{j_{ik}, j_i}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin her durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$f_z S_{j_{ik}, j_i, 0}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin her durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$f_z S_{j_{ik}, j_i, D}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin her durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$f_z S_{j_s, j_{ik}, j^{sa}}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$f_z S_{j_s, j_{ik}, j^{sa}, 0}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$f_z S_{j_s, j_{ik}, j^{sa}, D}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$f_{z,0} S_{j_s, j_{ik}, j^{sa}}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi iki

durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$fz,0S_{j_s,j_{ik},j^{sa},0}^{is}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$fz,0S_{j_s,j_{ik},j^{sa},D}^{is}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$fzS_{j_s,j_{ik},j_i}^{is}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

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

$fzS_{j_s,j_{ik},j_i,D}^{is}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$fz,0S_{j_s,j_{ik},j_i}^{is}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

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

durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$fz,0S_{j_s,j_{ik},j_i,D}^{is}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

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

$^0S_{j_s,j_{ik},j_i,0}^{is}$ : 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 ilk simetrik olasılık

$^0S_{j_s,j_{ik},j_i,D}^{is}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$fzS_{j_s,j_{ik},j^{sa},j_i}^{is}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_t, 0}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabilecegi olaylara göre ilk simetrik olasılık

${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_t, D}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabilecegi olaylara göre ilk simetrik olasılık

${}_{fz,0}S_{j_s, j_{ik}, j^{sa}, j_t}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabilecegi olaylara göre ilk simetrik olasılık

${}_{fz,0}S_{j_s, j_{ik}, j^{sa}, j_t, 0}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabilecegi olaylara göre ilk simetrik olasılık

${}_{fz,0}S_{j_s, j_{ik}, j^{sa}, j_t, D}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabilecegi olaylara göre ilk simetrik olasılık

${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_t}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabilecegi olaylara göre ilk simetrik olasılık

${}_{fz,0}S_{j_s, j_{ik}, j^{sa}, j_t, 0}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son

durumunun bulunabilecegi olaylara göre ilk simetrik olasılık

${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_t, D}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabilecegi olaylara göre ilk simetrik olasılık

${}_{fz}S_{\Rightarrow j_s, j_{ik}, j^{sa}}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabilecegi olaylara göre herhangi iki duruma bağlı ilk simetrik olasılık

${}_{fz}S_{\Rightarrow j_s, j_{ik}, j^{sa}, 0}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabilecegi olaylara göre herhangi iki duruma bağlı ilk simetrik olasılık

${}_{fz}S_{\Rightarrow j_s, j_{ik}, j^{sa}, D}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabilecegi olaylara göre herhangi iki duruma bağlı ilk simetrik olasılık

${}_{fz,0}S_{\Rightarrow j_s, j_{ik}, j^{sa}}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabilecegi olaylara göre herhangi iki duruma bağlı ilk simetrik olasılık

${}_{fz,0}S_{\Rightarrow j_s, j_{ik}, j^{sa}, 0}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve

herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı ilk simetrik olasılık

$fz,0S_{\Rightarrow j_s, j_{ik}, j^{sa}, D}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı ilk simetrik olasılık

$fzS_{\Rightarrow j_s, j_{ik}, j_i}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk simetrik olasılık

$fzS_{\Rightarrow j_s, j_{ik}, j_i, 0}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk simetrik olasılık

$fzS_{\Rightarrow j_s, j_{ik}, j_i, D}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk simetrik olasılık

$fz,0S_{\Rightarrow j_s, j_{ik}, j_i}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk simetrik olasılık

$fz,0S_{\Rightarrow j_s, j_{ik}, j_i, 0}^{IS}$ : 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 ilk simetrik olasılık

$fz,0S_{\Rightarrow j_s, j_{ik}, j_i, D}^{IS}$ : 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 ilk simetrik olasılık

${}^0fzS_{\Rightarrow j_s, j_{ik}, j_i}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk simetrik olasılık

${}^0fzS_{\Rightarrow j_s, j_{ik}, j_i, 0}^{IS}$ : 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 herhangi bir ve son duruma bağlı ilk simetrik olasılık

${}^0fzS_{\Rightarrow j_s, j_{ik}, j_i, D}^{IS}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk simetrik olasılık

$fzS_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{IS}$ : 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 ilk simetrik olasılık

$fzS_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i, 0}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı ilk simetrik olasılık

$fzS_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i, D}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı ilk simetrik olasılık

$fz,0S_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı ilk simetrik olasılık

$fz,0S_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i, 0}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı ilk simetrik olasılık

$fz,0S_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i, D}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı ilk simetrik olasılık

${}^0fzS_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun

bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı ilk simetrik olasılık

${}^0fzS_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i, 0}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı ilk simetrik olasılık

${}^0fzS_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i, D}^{\text{IS}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı ilk simetrik olasılık

$fzS_{\Rightarrow j_s, \Rightarrow j_{ik}, j^{sa}, j_i}^{\text{IS}}$ : 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 ilk simetrik olasılık

$fzS_{\Rightarrow j_s, \Rightarrow j_{ik}, j^{sa}, j_i, 0}^{\text{IS}}$ : 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 ilk simetrik olasılık

$fzS_{\Rightarrow j_s, \Rightarrow j_{ik}, j^{sa}, j_i, D}^{\text{IS}}$ : 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 ilk simetrik olasılık

$fz,0S_{\Rightarrow j_s,\Rightarrow j_{ik},j^{sa},j_i}^{is}$ : 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 ilk simetrik olasılık

$fz,0S_{\Rightarrow j_s,\Rightarrow j_{ik},j^{sa},j_i,0}^{is}$ : 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 ilk simetrik olasılık

$fz,0S_{\Rightarrow j_s,\Rightarrow j_{ik},j^{sa},j_i,D}^{is}$ : 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 ilk simetrik olasılık

$fz^0S_{\Rightarrow j_s,\Rightarrow j_{ik},j^{sa},j_i}^{is}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı ilk simetrik olasılık

$fz^0S_{\Rightarrow j_s,\Rightarrow j_{ik},j^{sa},j_i,0}^{is}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı ilk simetrik olasılık

$fz^0S_{\Rightarrow j_s,\Rightarrow j_{ik},j^{sa},j_i,D}^{is}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı ilk simetrik olasılık

$fzS_{j_i}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fzS_{j_i,0}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fzS_{j_i,D}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

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

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

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

$fzS_{j,sa}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin durumuna bağlı ilk düzgün simetrik olasılık

$fzS_{j,sa,0}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin durumuna bağlı ilk düzgün simetrik olasılık

$fzS_{j,sa,D}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin durumuna bağlı ilk düzgün simetrik olasılık

$fzS_{j,s,j_i}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fzS_{j,s,j_i,0}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fzS_{j,s,j_i,D}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fz,S_{j,s,j_i}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fz,S_{j,s,j_i,0}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı

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

$fz,S_{j,s,j_i,D}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

${}^0S_{j,s,j_i}^{iss}$ : 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 ilk düzgün simetrik olasılık

${}^0S_{j,s,j_i,0}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

${}^0S_{j,s,j_i,D}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fzS_{j,s,j,sa}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fzS_{j,s,j,sa,0}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi bir

durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

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

$fz,0S_{j_s,j^{sa},0}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fz,0S_{j_s,j^{sa},D}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fzS_{j_{ik},j^{sa}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin herhangi iki durumuna bağlı ilk düzgün simetrik olasılık

$fzS_{j_{ik},j^{sa},0}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin herhangi iki durumuna bağlı ilk düzgün simetrik olasılık

$fzS_{j_{ik},j^{sa},D}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin herhangi iki durumuna bağlı ilk düzgün simetrik olasılık

$fzS_{j_s,j_{ik},j^{sa}}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fzS_{j_s,j_{ik},j^{sa},0}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fzS_{j_s,j_{ik},j^{sa},D}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fz,0S_{j_s,j_{ik},j^{sa}}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fz,0S_{j_s,j_{ik},j^{sa},0}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fz,0S_{j_s,j_{ik},j^{sa},D}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

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

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

$fzS_{j_s,j_{ik},j_i,D}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fz_0S_{j_s,j_{ik},j_i}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fz_0S_{j_s,j_{ik},j_i,0}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fz_0S_{j_s,j_{ik},j_i,D}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fz_0S_{j_s,j_{ik},j_i}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fz_0S_{j_s,j_{ik},j_i,0}^{iss}$ : 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 ilk düzgün simetrik olasılık

$fz_0S_{j_s,j_{ik},j_i,D}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fzS_{j_s,j_{ik},j^{sa},j_i}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fzS_{j_s,j_{ik},j^{sa},j_i,0}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fzS_{j_s,j_{ik},j^{sa},j_i,D}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

$fz_0S_{j_s,j_{ik},j^{sa},j_i}^{iss}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün simetrik olasılık

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

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

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

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

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

$fzS_{j_i}^{iso}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin son durumunun bulunabileceği

olaylara göre ilk düzgün olmayan simetrik olasılık

$fzS_{j_i,0}^{iso}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

$fzS_{j_i,D}^{iso}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

$^0S_{j_i}^{iso}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu simetrinin son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

$^0S_{j_i,0}^{iso}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

$^0S_{j_i,D}^{iso}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

$fzS_{j^{sa}}^{iso}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin durumuna bağlı ilk düzgün olmayan simetrik olasılık

$f_z S_{j_s,0}^{ISO}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin durumuna bağlı ilk düzgün olmayan simetrik olasılık

$f_z S_{j_s,D}^{ISO}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin durumuna bağlı ilk düzgün olmayan simetrik olasılık

$f_z S_{j_s,j_i}^{ISO}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

$f_z S_{j_s,j_i,0}^{ISO}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

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

$f_{z,0} S_{j_s,j_i}^{ISO}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

$f_{z,0} S_{j_s,j_i,0}^{ISO}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

$f_{z,0} S_{j_s,j_i,D}^{ISO}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

${}^0 f_z S_{j_s,j_i}^{ISO}$ : 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 ilk düzgün olmayan simetrik olasılık

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

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

$f_z S_{j_s,j_s}^{ISO}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

$f_z S_{j_s,j_s,0}^{ISO}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

$f_z S_{j_s,j_s,D}^{ISO}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu

bağımlı simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

$f_z S_{j_s, j^{sa}}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

$f_{z,0} S_{j_s, j^{sa},0}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

$f_{z,0} S_{j_s, j^{sa},D}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara

$f_z S_{j_{ik}, j^{sa}}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin herhangi iki durumuna bağlı ilk düzgün olmayan simetrik olasılık

$f_z S_{j_{ik}, j^{sa},0}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin herhangi iki durumuna bağlı ilk düzgün olmayan simetrik olasılık

$f_z S_{j_{ik}, j^{sa},D}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin herhangi iki durumuna bağlı ilk düzgün olmayan simetrik olasılık

$f_z S_{j_s, j_{ik}, j^{sa}}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

$f_z S_{j_s, j_{ik}, j^{sa},0}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

$f_z S_{j_s, j_{ik}, j^{sa},D}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

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

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

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

$f_z S_{j_s, j_{ik}, j^{sa}, j_i}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son

durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

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

${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i, D}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

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

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

${}_{fz,0}S_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i, D}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı ilk düzgün olmayan simetrik olasılık

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

${}_{fz}^0S_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i, 0}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir

bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

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

${}_{fz}S_{\Rightarrow j_s, j_{ik}, j^{sa}}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı ilk düzgün olmayan simetrik olasılık

${}_{fz}S_{\Rightarrow j_s, j_{ik}, j^{sa}, 0}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı ilk düzgün olmayan simetrik olasılık

${}_{fz}S_{\Rightarrow j_s, j_{ik}, j^{sa}, D}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı ilk düzgün olmayan simetrik olasılık

${}_{fz,0}S_{\Rightarrow j_s, j_{ik}, j^{sa}}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı ilk düzgün olmayan simetrik olasılık

$f_{z,0}S_{\Rightarrow j_s, j_{ik}, j^{sa}, 0}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı ilk düzgün olmayan simetrik olasılık

$f_{z,0}S_{\Rightarrow j_s, j_{ik}, j^{sa}, D}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı ilk düzgün olmayan simetrik olasılık

$f_z S_{\Rightarrow j_s, j_{ik}, j_i}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk düzgün olmayan simetrik olasılık

$f_z S_{\Rightarrow j_s, j_{ik}, j_i, 0}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk düzgün olmayan simetrik olasılık

$f_z S_{\Rightarrow j_s, j_{ik}, j_i, D}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk düzgün olmayan simetrik olasılık

$f_{z,0}S_{\Rightarrow j_s, j_{ik}, j_i}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

herhangi bir ve son duruma bağlı ilk düzgün olmayan simetrik olasılık

$f_{z,0}S_{\Rightarrow j_s, j_{ik}, j_i, 0}^{\text{ISO}}$ : 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 ilk düzgün olmayan simetrik olasılık

$f_{z,0}S_{\Rightarrow j_s, j_{ik}, j_i, D}^{\text{ISO}}$ : 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 ilk düzgün olmayan simetrik olasılık

${}^0f_z S_{\Rightarrow j_s, j_{ik}, j_i}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk düzgün olmayan simetrik olasılık

${}^0f_z S_{\Rightarrow j_s, j_{ik}, j_i, 0}^{\text{ISO}}$ : 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 herhangi bir ve son duruma bağlı ilk düzgün olmayan simetrik olasılık

${}^0f_z S_{\Rightarrow j_s, j_{ik}, j_i, D}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı ilk düzgün olmayan simetrik olasılık

göre herhangi bir ve son durumuna bağlı ilk düzgün olmayan simetrik olasılık

$f_z S_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{\text{ISO}}$ : 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 ilk düzgün olmayan simetrik olasılık

$f_z S_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i, 0}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı ilk düzgün olmayan simetrik olasılık

$f_z S_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i, D}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı ilk düzgün olmayan simetrik olasılık

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

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

$f_{z,0} S_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i, D}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara

${}^0 f_z S_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı ilk düzgün olmayan simetrik olasılık

${}^0 f_z S_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i, 0}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı ilk düzgün olmayan simetrik olasılık

${}^0 f_z S_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i, D}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı ilk düzgün olmayan simetrik olasılık

$f_z S_{\Rightarrow j_s, \Rightarrow j_{ik}, j^{sa}, j_i}^{\text{ISO}}$ : 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 ilk düzgün olmayan simetrik olasılık

$f_z S_{\Rightarrow j_s, \Rightarrow j_{ik}, j^{sa}, j_i, 0}^{\text{ISO}}$ : 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 ilk düzgün olmayan simetrik olasılık

$fzS_{\Rightarrow j_s \Rightarrow j_{ik}, j^{sa}, j_i, D}^{\text{ISO}}$ : 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 ilk düzgün olmayan simetrik olasılık

$fz,0S_{\Rightarrow j_s \Rightarrow j_{ik}, j^{sa}, j_i}^{\text{ISO}}$ : 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 ilk düzgün olmayan simetrik olasılık

$fz,0S_{\Rightarrow j_s \Rightarrow j_{ik}, j^{sa}, j_i, 0}^{\text{ISO}}$ : 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 ilk düzgün olmayan simetrik olasılık

$fz,0S_{\Rightarrow j_s \Rightarrow j_{ik}, j^{sa}, j_i, D}^{\text{ISO}}$ : 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 ilk düzgün olmayan simetrik olasılık

${}^0S_{\Rightarrow j_s \Rightarrow j_{ik}, j^{sa}, j_i}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı ilk düzgün olmayan simetrik olasılık

${}^0S_{\Rightarrow j_s \Rightarrow j_{ik}, j^{sa}, j_i, 0}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir

bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı ilk düzgün olmayan simetrik olasılık

${}^0S_{\Rightarrow j_s \Rightarrow j_{ik}, j^{sa}, j_i, D}^{\text{ISO}}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı ilk düzgün olmayan simetrik olasılık

# 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 edilebilir kurallı tablolar kullanılmaktadır. Farklı dizilimsiz dağılımlarda durumların küçükten büyükeye sıralama için verilen eşitliklerde kullanılan durum sayılarının 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 olmakta dağılımının 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 DİZİLİMSİZ DAĞILIMLAR

Bağımlı dağılım ve bir bağımsız olasılıklı durumla oluşturulabilecek dağılımlara ve bağımlı olasılıklı dağılımların kesişen olay sağlığından (bağımlı olay sağısı) ve (yüksek olay sağası) (bağımsız olay sağısı) dağılımla bağımlı ve bir bağımsız olasılık dağılımlar elde edilir. Bağımlı dağılım farklı dizilimsiz dağılımlarda oluşturulduğunda, bu dağılımlara bağımlı ve bir bağımsız olasılık farklı dizilimsiz dağılımlar denir. Bağımlı ve bir bağımsız olasılıklı dağılımlar; bağımlı dağılımlara, bağımsız durumlar ilk sağdan dağıtılmaya başlanarak tabloları elde edilir. Bu bölümde verilen eşitlikler, bu yöntemle elde edilen kurallı tablolara göre verilmektedir. Farklı dizilimsiz dağılımlarda durumların küçükten-

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

Farklı dizilimsiz dağılımlarda simetrinin durumlarının olasılık dağılımındaki sıralama simetrik olasılıkları etkilediğinden, bu bağımlı ve bir bağımsız olasılıkları farklı dizilimsiz dağılımları da etkiler. Bu nedenle bağımlı ve bir bağımsız olasılıkları farklı dizilimsiz dağılımlarda, simetrinin durumlarının bulunabileceği oylara göre simetri olasılık eşitlikleri, simetrinin durumlarının olasılık dağılımındaki sıralamalarına göre ayrı ayrı olacaktır. Bu eşitliklerin elde edilmesinde bağımlı olasılıklı farklı dizilimsiz dağılımlarda simetrinin durumların bulunabileceği oylara göre çıkarılan eşitlikler kullanılacaktır. Bu eşitlikler, bir bağımlı ve bir bağımsız olasılıklı dağılımlar için VDC Üçgeni'nden çıkarılan eşitliklerle birleştirilerek, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımların yeni eşitlikleri elde edilecektir. Eşitlikleri adlandırılmasında bağımlı olasılıklı farklı dizilimsiz dağılımlarda kullanılan adlandırmalar kullanılacaktır. 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” 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 sayıda sınır değerleri, simetrinin küçükten-büyük'e sıralanan dağılımlarına 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 başlayan ilk bağımlı durumu bağımlı olasılıklı dağılımin ilk bağımlı durumu bağımlı olasılıklı dağılımin ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin ilk herhangi iki ve son durumunun bulunabileceği oylara göre ilk düzgün olmayan simetrik olasılığın eşitlikleri verilmektedir.

***SİMETRİDEN SEÇİLEN DÖRT DURUMA GÖRE İLK DÜZDÜN OLMAYAN SIMETRİK OLASILIK***

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

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

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

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

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

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

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_i} = \sum_{k=1}^n \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )} \sum_{k=j^{sa}+l_{ik}-l_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=l_{sa}+n-D)}^{n} \sum_{j_i=l_i+n-D}^{n} \\ \sum_{n_i=n+k}^{n} \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\ \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}.$$

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

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

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

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

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

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

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

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+j_{ik}-\mathbb{k}_1) \wedge (j_{is}+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \wedge (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(\mathbf{n}_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(\mathbf{n}_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

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

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty} \\
&\quad \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-l_{ik})}^{\infty} \sum_{j_i=j_{ik}+n-D}^{\infty} \\
&\quad \sum_{n_i=n+\mathbb{k}}^{\infty} \sum_{(n_i-j_s+1)}^{\infty} \sum_{n_{ik}=n-\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\infty} \\
&\quad \sum_{(n_{ik}-n_{sa}-\mathbb{k}_2-\mathbb{k}_3)}^{\infty} \sum_{(n_s=n+\mathbb{k}_3-j_i+1)}^{\infty} n_s=n-j_i+1 \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - j_{is} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_{is} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
&\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
&\quad \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
&\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
&\quad \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}
\end{aligned}$$

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

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-l_{sa}}^{\binom{(\ )}{( )}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{(\ )}{( )}} \sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{\mathbf{n}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{lk}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{\binom{(\ )}{( )}} \\
& \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{ik})!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_i) \cdot (j_s - 2)!} \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i) \cdot (\mathbf{n} - j_i)!}
\end{aligned}$$

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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

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

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-l_{sa}}^{\binom{(\ )}{( )}} \sum_{(j^{sa}=\mathbf{l}_s+\mathbf{n}+j_{sa}-D-1)}^{(j_i+j_{sa}-s)} \sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{\mathbf{n}}
\end{aligned}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.\left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left(\right.\left.\right)}$$

$$8\,$$

$$D>\textcolor{red}{n} < n$$

$$\frac{(n_i+j_{ik}+j_{sa}-j^{sa}-s-\Bbbk_1-\Bbbk_2-\Bbbk_3-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\Bbbk_1-\Bbbk_2-\Bbbk_3)!\cdot(\boldsymbol{n}+j_{ik}+j_{sa}-j^{sa}-s-j_{sa}^{ik})!}.$$

$$\frac{(\boldsymbol{l}_s-2)!}{(\boldsymbol{l}_s-j_s)!\cdot(j_s-2)!}.$$

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge \boldsymbol{s}=s+\Bbbk \wedge$$

$$\Bbbk_z: z=3 \wedge \Bbbk=\Bbbk_1+\Bbbk_2+\dots+\Bbbk_{\textcolor{brown}{z}} \Rightarrow$$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{\textcolor{brown}{n}}\sum_{(j_s=j_{ik}+\boldsymbol{l}_s-l_{ik})}^{(\textcolor{brown}{n})}$$

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{i=1}^{\mathbf{n}} \sum_{(j_s = j_{ik} + l_s - \mathbf{l}_{ik})} \dots$$

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

$$\sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{\infty} \sum_{\substack{(j_s=j_{ik}-l_{ik}) \\ (l_s-l_{ik})}}^{(\ )}$$

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

$$\begin{array}{c} n \\ \triangle \\ n_i=n+\mathbb{k}_1 \quad n_s=n+\mathbb{k}_2-1 \quad n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1 \end{array}$$

$$\sum_{a=n_{ik}+j_{ik}-s-\mathbb{k}_2}^{(n_i+j_{ik}+j_{sa}-j^{sa}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

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

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\binom{n}{l_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
&\quad \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\binom{l_i+n+j_{sa}-D-s-1}{n}} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^n j_i=l_i+n- \\
&\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\binom{n_i-j_s+1}{n_{is}}} \sum_{n_{is}+j_{ik}-l_{ik}-\mathbb{k}_1}^n n_{is}+j_{ik}-l_{ik}-\mathbb{k}_1 \\
&\quad \sum_{(n_{ik}+j_{ik}-l_{ik}-\mathbb{k}_2)}^{\binom{n_{ik}+j_{ik}-l_{ik}-\mathbb{k}_2}{n_{sa}+j^{sa}-n_s-\mathbb{k}_3}} \sum_{(j^{sa}+1)=n-j_i+1}^{\binom{n_{sa}+j^{sa}-n_s-\mathbb{k}_3}{n_i-n_{is}-j_s}} \\
&\quad \frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{is} - l_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{is} - \mathbb{k}_2 - 1)!}{(j^{sa} - s - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
&\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
&\quad \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
&\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad \sum_{k=1}^{\binom{n}{l_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{n}{l_s}} \\
&\quad \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\binom{n+j_{sa}-s}{n}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{\binom{n+j_{sa}-s}{n}} j_i=j^{sa}+s-j_{sa}
\end{aligned}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\phantom{j}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(\phantom{j})}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

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

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{\mathbf{n}}{2}} \sum_{(j_s = j_{ik} + \mathbf{l}_s - \mathbf{l}_{ik})}$$

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{i=1}^{\mathbf{n}} \sum_{(j_s = j_{ik} + l_s - \mathbf{l}_{ik})} \left( \begin{array}{c} (n_{sa} - s) \\ (j_{sa} - i + j_{sa} - D - s) \end{array} \right)$$

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{\infty} \sum_{\substack{(j_s=j_{ik}-l_s-l_{ik})}}^{(\ )}$$

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

$$n_i = n + \mathbb{k}_1 \quad n_s = n + \mathbb{k}_2 - 1 \quad n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1$$

$$\sum_{a=n_{ik}+j_{ik}-s-\mathbb{k}_2}^{n} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

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

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge \mathbf{s} = \mathbf{s} + \mathbb{k} \wedge$$

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

$$\begin{aligned}
& {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right.} \\
& \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right.} \sum_{j_i=l_i+n-1}^n \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}-j_i+1}^{n_{is}+j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2)}^{n_{is}+j_{sa}-j_{ik}-\mathbb{k}_3} \sum_{j_{sa}=n-j_i+1}^{j^{sa}+1} \\
& \frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{ik} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{k=1}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right.}
\end{aligned}$$

gülden

$$\begin{aligned}
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^n \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i}^{n_{is}+j_{sa}-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^n \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^n \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^n \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

**gündü**

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left.\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\ \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_s)}^{\left.\right)}$$

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

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

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

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

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

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

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

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

$$\frac{(l_s - 1)!}{(l_s - j_{sa})! \cdot (j_{sa} - 2)!} \cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{\infty} \sum_{(j_s = j_{ik} + l_s^{ik})} \dots$$

$$\sum_{\substack{i_{ik}=l_i+n+j_s \\ j^{sa}=D-s}}^{n+j_{sa}^{ik}-s} \sum_{\substack{( ) \\ (j^{sa}+l_{sa}-l_{ik}) \neq i_{ik}}} \sum_{s-j_{sa}}$$

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

$$\frac{(n_i + \dots + j_{sa}^{ik})^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \dots - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

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

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{l_i} \sum_{(j_s=j_{ik}+l_s-l_i)}^{\binom{l_i}{n}} \\
 &\quad \sum_{l_i+n+j_{sa}^{ik}-D-s-1}^{l_i+n+j_{sa}^{ik}-D-1} \sum_{(j^{sa}=j_{ik}+l_{ik}-l_{sa})}^{\binom{n}{j_i=n-D}} \\
 &\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
 &\quad \sum_{(n_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_3-j_i)}^{(n_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_3-j_i-\mathbb{k}_3)} \\
 &\quad \sum_{(n_{ik}-n+\mathbb{k}_3-j_{ik}-1)}^{(n_i-n_{is}-1)} \sum_{n_s=n-j_i+1}^{(n_i-n_{is}-1)!} \\
 &\quad \frac{(n_i-n_{is}-1)!}{(j_s-n_{is}-1)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 &\quad \frac{(n_{ik}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-n_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(n_{ik}-n_{sa}-\mathbb{k}_2-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\
 &\quad \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 &\quad \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
 &\quad \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
 &\quad \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 &\quad \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
 &\quad \sum_{k=1}^{l_i} \sum_{(j_s=j_{ik}+l_s-l_i)}^{\binom{l_i}{n}}
 \end{aligned}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^n \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\mathbf{n}}
\end{aligned}$$

giuldi

$$\sum_{\substack{( ) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}^{\substack{( ) \\ (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}} \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

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

$$\frac{(l_s - 1)!}{(l_s - j_s) \cdot (\mathbf{n} - 2)!} \cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{j_{ik} = \max(j_{ik} - l_s, j^{sa} - l_{sa} + l_{ik})}^{\min(n_i - l_s, n_{sa} - l_{sa})} \sum_{s = j_{sa}}^{n - j_{sa}}$$

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

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

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

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

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

$$D \geq n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge \\ 2 \leq j_s \leq j_i \wedge j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

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

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

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

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

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i+n-D-s)} \\
& \sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}-n_{ik}+1)}^{\binom{n}{l_s}} \sum_{j_i=j_s+n-D}^n \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{sa}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
& \sum_{(n_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_3)}^{(n_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_3)} \sum_{n_s=n-j_i+1}^{n_i-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - l_s)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^n
\end{aligned}$$

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

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

$$\frac{\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-n_s-j_i+1}^{n_{sa}+j^{sa}-j_i-1}}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

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

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

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

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

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

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

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

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

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

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

$$\begin{aligned}
& \sum_{\substack{( ) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}^{} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{} \\
& \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \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 + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\
& D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge \\
& j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\
& s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \mathbb{k}_3, j_{sa}^i\} \wedge \\
& s \geq 6 \wedge s = s + \mathbb{k} \wedge \\
& \mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow \\
& f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}^{} \\
& \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}^{\mathbf{n}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.
\end{aligned}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{j_{ik} = \max(j_{ik} - l_s, (j^{sa} + j_{sa} - \mathbf{l}_{sa} - l_{ik}) - s)}^{\min(n_i - \mathbf{k}_1, (j^{sa} + j_{sa} - \mathbf{l}_{sa} - l_{ik}) - s - j_{sa})} \sum_{\substack{( ) \\ n_{ik} = n_i + j_{ik} - l_s}}^{\substack{(n_i - j_s + 1) \\ ( ) \\ n_{ik} = n_i + j_{ik} - \mathbf{k}_1}}$$

$$\sum_{\substack{( ) \\ n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbf{k}_2}}^{\substack{(n_i - j_s + 1) \\ ( ) \\ n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbf{k}_2}} \sum_{\substack{( ) \\ n_s = n_{sa} + j^{sa} - j_i - \mathbf{k}_3}}^{\substack{( ) \\ n_s = n_{sa} + j^{sa} - j_i - \mathbf{k}_3}}$$

$$\frac{(\mathbf{n}_i + \mathbf{n}_s + j_{sa} + j^{sa} - s - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3 - j_{sa}^{ik})!}{(\mathbf{n}_i - \mathbf{n} - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

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

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_i)}^{\infty} \\
 &\quad \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{ik}=j_{sa}+l_i)}^{\infty} \sum_{j_i=n-D}^{\mathbf{n}} \\
 &\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{sa}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
 &\quad \sum_{(n_{ik}=n+\mathbb{k}_3-j_{sa}+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_1-1)} \sum_{n_s=n-j_i+1}^{n-j_i-\mathbb{k}_3} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - j_{sa} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -
 \end{aligned}$$

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_s - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_s)! \cdot (n_i + l_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(\mathbb{k}_s - j_s)! \cdot (j_s - 2)!}.$$

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

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

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

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

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

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

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

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^{i_1}, \dots, j_{sa}^{i_2}, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_s : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

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

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

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

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1}$$

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

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

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

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

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

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

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

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

$$\sum_{k=1}^n \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

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

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

$$\begin{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-\mathbb{k}_3} \\
& \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \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 + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge \\
& l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge \\
& D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge \\
& j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\
& s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa} - 1, \mathbb{k}_3, j_{sa}^i\} \wedge \\
& s \geq 6 \wedge s = s + \mathbb{k} \wedge \\
& \mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow \\
& f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
& \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)}^{(n+j_{sa}-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+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.
\end{aligned}$$

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

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

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

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

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

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - \mathbb{k}_3)!}{(j_{ik} + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

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

$$\sum_{k=1}^{\lfloor \frac{D}{2} \rfloor} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\lfloor \frac{D}{2} \rfloor}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\lfloor \frac{D}{2} \rfloor} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\lfloor \frac{D}{2} \rfloor}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

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

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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

$$\begin{aligned}
& f(z^{j_{sa}^{ik}}) = \sum_{(j_{ik} = l_s + j_{sa}^{ik} - D - 1)} \sum_{(j^{sa} = n + j_{sa} - D - s)} \sum_{(j_i = j^{sa} + l_i - l_{sa})} \\
& \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)} \sum_{(n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1)} \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)} \\
& \sum_{(n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{(n_{sa} + j^{sa} - j_i - \mathbb{k}_3)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

g i u d i n y a

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

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

$$\sum_{k=1}^{\binom{D}{l_i}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{D}{l_s}} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{n+j_{sa}-s}{l_i+n+j_{sa}-D}} \sum_{n_i=n+\mathbb{k}(n+j_{sa}-s-1)}^{\binom{n_i-j_s+1}{n_i-k_1}} \sum_{n_{ik}=n_i+j_s-j_{ik}-\mathbb{k}_1}^{\binom{n_i-j_s+1}{n_i-k_2}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \dots = n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\binom{n_i-j_s+1}{n_i-k_3}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})! \cdot (n + j_i + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

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

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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

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

$$\begin{aligned} & \sum_{j_{ik}=\mathbf{l}_{ik}+\mathbf{n}-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_s}^{(n+j_{sa}-s)} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \frac{(n_{ik}+j_{ik}-j^{sa})!}{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)!} \cdot \frac{n_{sa}+j_{sa}-j_i-\mathbb{k}_3}{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j_{sa}+1) \quad n_s=n-j_i+\mathbb{k}_3} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - n_{ik} - j_s + 1)!} \cdot \\ & \frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \end{aligned}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathfrak{l}_s - 2)!}{(\mathfrak{l}_s - j_s)! \cdot (j_s - 2)!}.$$

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{\mathbf{n}}{s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{i=1}^{\mathbf{n}} \sum_{\substack{j_s = j_{ik} + l_s - l_{ik}}}^{(l_{sa} - l_{ik} - s)}$$

$$\sum_{\substack{j_{ik} = n + j_{sa}^{ik} - s \\ j_{ik} - j_{sa}^{ik} = n + j_{sa} - s}}^{(l_{sa} - l_{ik} - s)} \sum_{\substack{j_i = j^{sa} + l_i - l_{sa} \\ j_i - j_{sa} = n + \mathbb{k}_1 - s}}$$

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{i=i_k+j_{sa}-j_{ik}}^{n-i_k+j_{sa}-j_{ik}} \sum_{i_i=j^{sa}+l_i-l_{sa}}$$

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

$$\sum_{n_i=n_{ik}+j_{ik}-s-\mathbb{k}_1-\mathbb{k}_2}^{n_i+j_{ik}+j_{sa}-s-\mathbb{k}_1-\mathbb{k}_2} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

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

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - \mathbb{k}_3)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!}.$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{\substack{j_{ik}=j_s+1-j_s-l_s \\ (j^{sa}=j_{sa}-j_{sa}-j_{sa}^{ik})}} \sum_{\substack{i > j_{ik} \\ l_i > l_{sa}}} (n-s)$$

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

$$\sum_{\substack{i=n+\mathbb{k} \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}^n \sum_{\substack{i > j_{sa} \\ n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}} (n-s)$$

$$\frac{(n_i + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

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

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_i)}^{\infty} \\
&\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_{ik})}^{\infty} \\
&\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
&\sum_{(n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_1-1)}^{(n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_1-1)} \sum_{n_s=n-j_i+1}^{n_{is}-j_i-\mathbb{k}_3} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - j^{sa} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
&\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -
\end{aligned}$$

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

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

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

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

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

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

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

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^{i_1}, \dots, j_{sa}^{i_2}, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

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

$$\begin{aligned}
& \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{\mathbf{n}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{is}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& - \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
& \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(\right)} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{\mathbf{n}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

guido

$$\sum_{\substack{( ) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}^{\sum_{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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

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

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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

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

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{\lfloor \frac{D}{l_s} \rfloor} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\lfloor \frac{D}{l_s} \rfloor}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\lfloor \frac{D}{l_s} \rfloor} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\lfloor \frac{D}{l_s} \rfloor}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

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

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + k \wedge$$

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

$$\begin{aligned}
& f(z) = \sum_{j_{ik} = l_s + l_{sa}}^{\infty} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{\infty} \sum_{n_{ik} = n + k_2 + k_3 - j_{ik} + 1}^{\infty} \\
& \sum_{j_{sa} = n + j_{sa}^{ik} - D - 1}^{j^{sa} + j_{sa}^{ik} - 1} \sum_{n_{sa} = n + k_3 - j^{sa} + 1}^{n_{sa} + j^{sa} - j_i - k_3} \\
& \sum_{n_s = n - j_i + 1}^{n_{is} + j_s - j_{ik} - k_1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} .
\end{aligned}$$

**gündem**

**YAF**

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

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

$$\sum_{k=1}^{\binom{D}{l_i}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{D}{l_s}} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{n+j_{sa}-s}{l_{sa}+n-j_{sa}}} \sum_{(j^{sa}=l_{sa}+n-j_{sa})}^{\binom{n_i-j_s+1}{n_i-j_s}} \sum_{n_{ik}=n+i+j_{sa}-j_{ik}-\mathbf{k}_1}^{\binom{n_i-j_s+1}{n_i-j_s}} \\ \sum_{(n_{sa}=n_{ik}+n-i-j^{sa}-\mathbf{k}_2)}^{\binom{n_i-j_s+1}{n_i-j_s}} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i-\mathbf{k}_3)}^{\binom{n_i-j_s+1}{n_i-j_s}} \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3 - j_{sa}^{ik})!}{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3 - j_{sa})!}.$$

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

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbf{k} \wedge$$

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

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

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

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_i-k_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} n_{ik}=n+\mathbb{k}_2-j_i-k_1+1$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{\binom{\mathbf{D}}{\mathbf{n}}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\binom{\mathbf{D}}{\mathbf{n}}}$$

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

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

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

güldi

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

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

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{i=1}^{\mathbf{n}} \sum_{\substack{j_s = j_{ik} + l_s - l_{ik}}} \sum_{\substack{j_{ik} = l_{sa} + j_{sa}^{ik} - D \\ j_{ik} + j_{sa} - j_{sa}^{ik}}} \sum_{\substack{j_i = j^{sa} + l_i - l_{sa} \\ n + \mathbb{k} (n_{is} = n + \mathbb{k} - j_s + 1) \\ n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}}$$

$$\sum_{\substack{(n_i - j_s + 1) \\ (n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}} \sum_{\substack{n_{is} + j_s - j_{ik} - \mathbb{k}_1 \\ (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ n_{sa} + j^{sa} - j_i - \mathbb{k}_3 \\ n_s = \mathbf{n} - j_i + 1}}$$

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{\infty} \sum_{\substack{j_s = j_{ik} + l_s - l_{ik}}}^{} \sum_{\substack{i_i = j^{sa} + l_i - l_{sa}}}^{} \sum_{\substack{n_i = n + k \\ n_{ik} = n + k - j_s}}^{} \sum_{\substack{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}}^{} \sum_{\substack{n_{is} = n_{ik} + j_{ik} - \mathbb{k}_1 - \mathbb{k}_2 \\ n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}}^{} \sum_{\substack{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})! \\ (n_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa})! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}}^{} \cdot$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa})! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-\mathbb{k}_3}^{n_{sa}+j^{sa}-\mathbb{k}_3}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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

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

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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

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

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

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

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

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

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

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

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - \mathbb{k}_3)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!}.$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{j_{ik}=j_s - l_s}^{j_{sa}-l_s} \sum_{(j^{sa}=j_{sa}+j_{sa}-j_{sa}^{ik})}^{(j^{sa}=j_{sa}+j_{sa}-j_{sa}^{ik})} \sum_{l_i>j_{sa}-l_{sa}}^{l_i>j_{sa}-l_{sa}}$$

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

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

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

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

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_i)}^{\infty} \\
 &\quad \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+l_{sa}-l_i)}^{(j_i+j_{sa}-s)} \sum_{j_i=\mathbf{n}-n-D}^{\mathbf{n}} \\
 &\quad \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}-\mathbb{k}_2-\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
 &\quad \sum_{(n_{ik}-n_{is}-j^{sa}-j_{sa})}^{(n_{ik}-n_{is}-j^{sa}-j_{sa})} \sum_{n_s=\mathbf{n}-j_i+1}^{n-j_i-\mathbb{k}_3} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - j_{sa} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{is} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -
 \end{aligned}$$

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

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}.$$

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

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

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

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

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

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

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k}_1 = 0 \wedge$$

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

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^{i_1}, \dots, j_{sa}^{i_2}, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq \mathbf{n} + \mathbb{k} \wedge$$

$$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

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

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

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

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1}$$

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 1)!}{(\ell_s - 1)! \cdot (s - 2)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

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

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

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

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

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

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

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^l\}$$

$$s \neq 6 \wedge s = 1 \wedge \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

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

~~Y~~

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

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

<del

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa})!}.$$

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

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{\substack{(n_i=n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2) \\ n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}}^{\infty} \sum_{\substack{(n_i+j_{ik}+j_{sa}-j^{sa}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa})! \\ (n_i-j_i-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)! \cdot (\mathbf{n}+j_{ik}+j_{sa}-j^{sa}-s-j_{sa})!}}^{\infty}$$

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

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

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

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

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

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

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

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

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

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\begin{aligned}
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(n+j_{sa}-s\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^n \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\left(n_i-j_s+1\right)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{\left(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{sa}-j_{sa}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\
& \frac{(n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right.} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right.} \sum_{j_i=j^{sa}+s-j_{sa}}^n
\end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s}^{\left.\right)} \\
& \quad \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot \\
& \quad \frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \\
& \quad \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (\mathbf{n} - j_i - l_i)!}
\end{aligned}$$

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

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

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

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - i > l_{ik} \wedge l_{sa} + j_{sa}^{ik} - s > \dots \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^l\}$$

$$s \neq 6 \wedge s = \dots \wedge \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{l_t + \mathbf{n} + j_{sa}^{ik} - D - s - 1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right.} \sum_{j_i=l_i+n-D}^{\left.\right)}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_s+\mathbf{n}+j_{sa}^{ik}-D-1}^{l_t+\mathbf{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(n+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{\mathbf{n}}
\end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

~~Y~~

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

~~A~~

$$\frac{(l_s - 2)!}{(j_s - 2)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j^{sa} + l_{sa} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - l_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\binom{D}{2}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{D}{2}}$$

$$\sum_{\substack{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s \\ (j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}}^{n+j_{sa}^{ik}-s} \sum_{\substack{(n+j_{sa}-s) \\ (j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s)}} \sum_{\substack{n \\ j_i=j^{sa}+s-j_{sa}}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(\mathbf{n} - 1)!}{(n_s + \mathbf{n} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{n})! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^{\infty}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\infty}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j_{sa}, s} = \sum_{k=1}^{(l_i + n - D - s)} \sum_{(j_s = l_{ik} + n - D - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s}^{(n + j_{sa} - s)} \sum_{(j_{sa} = l_{sa} + n - D)} \sum_{j_i = l_i + n - D}^n$$

$$\sum_{n_i = n + \mathbb{k}} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n + \mathbb{k}_3 - j_{sa} + 1)}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(\mathbf{l}_i - 1)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{\substack{i_{ik} = j_s + l_{ik} - l_s \\ i_{ik} + \mathbb{k} = n + \mathbb{k} - j_s + 1}} \sum_{\substack{(n-s+1) \\ (j^{sa} + j_{ik} + j_{sa} - j_{sa}^{ik})}} \sum_{\substack{j_i = j^{sa} + s - j_{sa} \\ n \\ n-i_s - s}} \sum_{\substack{\mathbb{k}_1 \\ n + \mathbb{k}}} \sum_{\substack{(n-i_s - s) \\ (j^{sa} + j_{ik} + j_{sa} - j_{sa}^{ik})}} \sum_{\substack{j_i = j^{sa} + s - j_{sa} \\ n \\ n-i_s + j_s - j_{ik} - \mathbb{k}_1}}$$

$$\sum_{\substack{(n_i - j_s) \\ (n_{is} = n + \mathbb{k} - j_s + 1)}} \sum_{\substack{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1 \\ (n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}} \sum_{\substack{n_{is} + j_s - j_{ik} - \mathbb{k}_1 \\ (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{sa} + j^{sa} - j_i - \mathbb{k}_3)}} \sum_{\substack{n_s = n - j_i + 1 \\ (n_s = n - j_i + 1)}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{\substack{k=1 \\ j_{ik}=j_s+l_{ik}-l_{sa}}}^{\infty} \sum_{\substack{j_i=j^{sa}+s-j_{sa} \\ j_i=j_{sa}+s-j_{sa}}}^{\infty}$$

$$\sum_{n_i=n+\mathbb{k}}^{\infty} \sum_{n_{ik}=n+\mathbb{k}-j_{ik}}^{\infty} n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1$$

$$\sum_{n_i=n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\infty}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\geq \mathbf{n} < n \wedge \mathbf{l}_s > D - j_i - 1 \wedge$$

$$2 \leq j_i \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i + n - D - s)} \sum_{(j_s = l_s + n - D)}$$

$$\begin{aligned} & \sum_{j_{ik} = j_s + l_{ik} - l_s}^{(n + j_{sa} - s)} \sum_{(j^{sa} = l_{sa} + n - D)} \sum_{j_i = l_i + n -}^n \\ & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{is} + j_{ik} - \mathbb{k}_1 = j_{ik} + 1}^{n_{is} + j_{ik} - \mathbb{k}_2} \\ & \sum_{n_{ik} + j_{ik} - \mathbb{k}_2 = n_{sa} + j_{sa} - \mathbb{k}_3}^{n_{ik} + j_{ik} - \mathbb{k}_1} \sum_{n_s = n - j_i + 1}^{n_{sa} + j_{sa} - \mathbb{k}_3} \\ & \frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(n_i - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - l_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(n_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\ & \sum_{k=1}^{(n - s + 1)} \sum_{(j_s = l_i + n - D - s + 1)} \end{aligned}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{sa}+j^{sa}-j_i-1}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (j_s-n_{is}-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j^{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{( )}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa})!}.$$

$$\frac{(l_s - 1)!}{(\ell_s - 1)! \cdot (s - 2)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - i = l_{ik} \wedge \ell_s - j_{sa} - s = \dots \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^l\}$$

$$s \neq 6 \wedge s = \dots \wedge \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_i+\mathbf{n}-D}^{\mathbf{n}} \\ \sum_{n_l=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-\mathbb{k}_1+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y</del~~

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$S_{i,k,j,s,a,j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\infty} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{j_{ik} = \mathbf{n} + \mathbf{l}_{ik} - l_{sa}}^{\infty} \sum_{(j^{sa} = \mathbf{n} + \mathbf{k} + j_{sa} - D - s)}^{\infty} \sum_{j_i = j^{sa} + \mathbf{l}_i - l_{sa}}^{\infty}$$

$$\sum_{n_{ik} = \mathbf{n} + \mathbf{k} (n_{is} = \mathbf{n} + \mathbf{k} - j_s + 1)}^{\infty} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbf{k}_1}^{\infty} \sum_{n_i = j_i - j_{ik} + 1}^{\infty}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbf{k}_2)}^{\infty} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbf{k}_3}^{\infty}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$> n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{n-j_{sa}^{ik}+1} \sum_{(j_s=j_{sa}+n-D)}^{(j_k-j_{sa}^{ik}+1)} \\
 &\quad \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D}^{n+j_{sa}^{ik}-s} \sum_{l_{sa}=l_i+l_{ik}-n}^{i_k+l_{sa}-l_{ik}} \sum_{l_i=j^{sa}+l_i-l_{sa}}^{i_k-\mathbb{k}_1} \\
 &\quad \sum_{n_i=n+\mathbb{k}} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 &\quad \sum_{(n_{sa}=\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\mathbb{k} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.
 \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\infty} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\infty}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{sa}}^{\infty}$$

$$\sum_{(j_{sa}=n_{ik}+j_{sa}-l_{sa}-\mathbb{k}_2)+j_{sa}-1}^{\infty} \sum_{j_i=j^{sa}-\mathbb{k}_1-j_{sa}}^{\infty} \sum_{j_{ik}=j^{sa}-\mathbb{k}_3-j_{sa}}^{\infty}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} - n_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > -n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} - 1 > l_s \wedge l_{sa} - j_{sa}^{ik} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge l_s > -\mathbb{k} \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i + \mathbf{n} - D - s)} \sum_{(j_s = l_s + n - D)}^{\infty}$$

$$\begin{aligned}
& \sum_{j_{ik}=\mathbf{l}_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{\mathbf{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}^{} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
& \frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=1}^{\mathbf{n}-s+1} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)}^{(n-s+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\mathbf{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}^{} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

g i u l d u

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$(l_s - 2)!$$

$$- j_s - 1) \cdot (\mathbf{n} - j_i)!.$$

$$(l_s - 2)!$$

$$- j_s) \cdot (j_s - 2)!.$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_{sa}) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(\mathbf{n}-s+1)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(j_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_s)} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(j^{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(j_i)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{ik})}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{sa})} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(n_s)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$S_{i,k,j,s,a,j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(\mathbf{l}_i - \mathbf{l}_s)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{j_{ik} = \mathbf{n} + \mathbf{l}_{ik} - l_{sa}}^{\infty} \sum_{(j^{sa} = j_{sa} - l_i)}^{\infty} \sum_{j_i = l_{sa} + \mathbf{n} + s - D - j_{sa}}^{\mathbf{n}} \sum_{(n_i - j_i - 1)}^{\infty} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{\infty} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{\infty}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}_1}^{\infty} \sum_{(n_{is} = \mathbf{n} + \mathbb{k}_1 - j_s + 1)}^{\infty} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{\infty} \sum_{(n_i - j_i - 1)}^{\infty}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{\infty} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{\infty}$$

$$\frac{(n_i + \mathbf{n} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbf{l}_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$> n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=1}^{l_{ik}-j_{sa}^{ik}+1} \sum_{(j_s=j_{sa}+n-D)}^{(j_s=j_{sa}+n-k-j_{sa}^{ik}+1)} \\
& \sum_{j_{ik}=j^{sa}+l_i}^{n_i} \sum_{(j_{sa}=l_{sa}+n-s)}^{(j_{sa}=l_{sa}+n-i)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(j_i=j^{sa}+l_i-n+k_1)} \\
& \sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{ik}=n+\mathbb{k}-j_s+j_{sa})}^{(n_{ik}=n+\mathbb{k}-j_s+j_{sa}-1)} \sum_{n_k=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_k=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)} \\
& \sum_{(n_{ik}=n+\mathbb{k}_2-\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}=n+\mathbb{k}_2-\mathbb{k}_3-j^{sa}-1)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{\binom{n}{l_s}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{n}{l_i}} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\binom{n+j_{sa}-s}{l_i}} \sum_{(j^{sa}=l_{sa}+n-D)}^{\binom{n_i-j_s+1}{l_i}} \sum_{j_i=j^{sa}+l_i-l_s}^{\binom{n_i-j_s+1}{l_i}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\binom{n_i-j_s+1}{l_i}} n_{ik}=n_{is}-\mathbb{k}_1-j_{ik}-\mathbb{k}_1 \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-1)}^{\binom{n_i-j_s+1}{l_i}} n_s=n_{sa}+j^{sa}-j_i \\
 & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa})!} \cdot \\
 & \frac{(l_s - 2)!}{(\mathbb{k}_1 - j_s) \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i) \cdot (n - j_i)!} \\
 D \geq n < n \wedge l_s > D - n - 1 \wedge \\
 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge \\
 l_{ik} - j_{sa}^{ik} + 1 > s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
 D \geq n < n \wedge I = \mathbb{k}_1 - 0 \wedge \\
 j_{sa} = j_{sa}^{i_k} - 1 \wedge j_{sa}^{ik} < j_{sa}^{i_k} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\
 s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^{i_k}, \dots, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge \\
 s \geq 6 \wedge s \leq s + \mathbb{k} \wedge \\
 z \cdot z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow \\
 f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{j_{ik}-j_{sa}^{ik}+1}{l_i}} \sum_{(j_s=l_s+n-D)}^{\binom{j_{ik}-j_{sa}^{ik}+1}{l_i}}
 \end{aligned}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{ik}-n_{sa}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)} \\
& \sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

g i u l d u

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\ \right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{sa} + n - D - j_{sa})} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{n + j_{sa}^{ik} - s} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{\left(\ \right)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(l_s - 1)!}{(l_s - j_{sa} - 1)! \cdot (l_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - l_i - j_{sa} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{n-s+1} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}^{(n-s+1)}$$

$$\sum_{j_i=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{} \quad \quad \quad$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{k=1 \\ k=j_s+1 \\ k=j_{ik}-1 \\ k=j_{sa}^{ik}+l_{sa}-l_{ik}}}^{n-s+1} l_{ik} - l_i - l_{sa}$$

$$\sum_{\substack{j_{ik}=j_s+j_{sa}^{ik}-1 \\ j_{ik}=j_s-j_{sa}^{ik}+1}}^{j_{sa}^{ik}-1} (j_{sa}^{ik} - l_{sa} + l_{ik} - j_{ik}) j_{ik} - l_i - l_{sa}$$

$$\sum_{\substack{n=\mathbb{k} \\ n=n+1 \\ n=n+1-j_s+1}}^n \sum_{\substack{n_{ik}=n+1-j_s+1 \\ n_{ik}=n+1-j_{ik}-\mathbb{k}_1}}^{n_{ik}-j_s+1} n_{ik} - l_i - l_{sa}$$

$$\sum_{\substack{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2 \\ n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_3}}^{n_{sa}-j_{sa}+1} n_s = n_{sa} + j_{sa} - j_i - \mathbb{k}_3$$

$$\frac{(n_i + j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j_{sa}^{ik} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} - j_{sa} \leq j_{sa}^{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-1)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 &\quad \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-n, j_{ik}=j_s+n-1-j_{sa})}^{(\text{---}))} \\
 &\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i+\mathbb{k}_1-j_{ik}+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n_i+\mathbb{k}_2-j_{is}+1)}^{(n_{is}+j_s-j_{ik})} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - j_{is} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_{is} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - 
 \end{aligned}$$

gül

$$\sum_{k=1}^{\binom{n}{l_i}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{n}{l_i}}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\binom{n}{l_i}} \sum_{j_i=l_{ik}+s+n-D-\binom{l_i}{2}}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-\mathbb{k}_1-j_{ik}-\mathbb{k}_1}^{n_i-j_s+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_2)}^{\binom{n}{l_s}} \sum_{n_{is}=n_{sa}+j^{sa}-j_i}^{n_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_1 - j_{sa})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_1)! \cdot (n + l_{ik} + l_{sa} - j^{sa} - j_{sa} - j_{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n \wedge \dots \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > \dots \wedge l_{sa} + j_{sa}^{ik} - j_{sa} < l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k}_1 > 0 \wedge$$

$$j_{sa} = j_{sa}^{i-1} \wedge j_{sa}^{ik} < j_{sa}^{i-1} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{i-1}, \dots, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = r + \mathbb{k} \wedge$$

$$\therefore z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}^{\binom{n}{l_i}}$$

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{\infty} \sum_{(j^{sa}=\mathbf{l}_{ik}+\mathbf{n}+\mathbf{j}_{sa}-D-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}^{\infty} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{sa}+j^{sa}-j_i-1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (j_s-n_{is}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j^{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
& - \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} \\
& \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
& \sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{\infty} \sum_{(j^{sa}=\mathbf{l}_{ik}+\mathbf{n}+\mathbf{j}_{sa}-D-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}^{\infty} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{sa} - s - j_{sa} \leq j_s \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} < l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j_{sa}, j_l} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + \mathbf{n} - D)}$$

$$\sum_{j_{ik} = l_{ik} + \mathbf{n} - D}^{n + j_{sa}^{ik} - s} \sum_{(j_{sa} = j_{ik} + l_{sa} - l_{ik})}^{(\ )} \sum_{j_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j_{sa} + 1)}^{(n_{ik} + j_{ik} - j_{sa}^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - l_i) \cdot (l_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - l_{ik} - j_{sa} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\sum_{j_s=l_{ik}+\mathbf{n}-D}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\left(\right)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\left(\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge k = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& f(z) = \sum_{i_k=l_{ik}+n-D}^{n+j_{sa}^{ik}} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_{ik}+n-D)-j_{sa}} \sum_{n_{ik}=n+\mathbb{k}_2+j_{ik}-l_{ik}}^{n+j_{sa}^{ik}} \\
& \quad \sum_{n_{is}=n+\mathbb{k}_1-j_s+1}^{n+\mathbb{k}} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} .
\end{aligned}$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(n-s+1)} \sum_{\substack{j_s = l_{ik} + n - D - j_{sa}^{ik} + 1}}^{} \sum_{\substack{n+j_{sa}^{ik}-s \\ j_{ik} = j_s + j_{sa}^{ik} - 1}}^{} \sum_{\substack{(\ ) \\ (j^{sa} = j_s + l_{sa} - l_{ik}, j_{sa}^{sa} = j_{sa} - l_{sa})}}^{} \sum_{\substack{(n_i - j_s + 1) \\ n_i = n + \mathbb{k} (n_{is} - \mathbb{k} - j_s)}}^{} \sum_{\substack{n_{is} + j_s - j_{ik} - \mathbb{k}_1 \\ (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{sa} + j_{sa} - j_i - \mathbb{k}_3)}}^{} \sum_{\substack{n_{is} + j_s - j_{ik} - \mathbb{k}_1 \\ n_{sa} + j_{sa} - j_i - \mathbb{k}_3 \\ n_s = n - j_i + 1}}^{} \sum_{\substack{(n_i - n_{is} - 1)! \\ (j_s - j_i - 1)! \cdot (n_i - n_{is} - j_s + 1)!}}^{} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\begin{aligned}
 & \sum_{k=1}^{(n-s+1)} \sum_{\substack{j_s = l_{ik} + n - D - j_{sa}^{ik} + 1}}^{(n-s+1)} \\
 & \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{\infty} \sum_{\substack{(j_{sa} = j_{ik} + l_{sa} - l_{ik}) \\ j_i = j_{sa} + l_i - l_{ik}}}^{\infty} \sum_{\substack{(n_i - j_s + 1) \\ n_{ik} = n_{is} + l_{ik} - j_{ik} - k_1}}^{\infty} \\
 & \sum_{\substack{(n_{sa} = n_{ik} + j_{ik} - j_{sa} - l_{sa}) \\ n_s = n_{sa} + j_{sa} - j_i}}^{\infty} \sum_{\substack{(l_s - 2)! \\ (l_i - j_s)! \cdot (j_s - 2)!}}^{\infty} \\
 & \frac{(n_i + j_{ik} + j_{sa} - j_{sa} - l_{sa} - l_{ik} - k_2 - k_3 - j_{sa})!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + l_{sa} + l_{ik} - j_{sa} - j_{sa} - j_{sa})!} \cdot \\
 & \frac{(l_s - 2)!}{(l_i - j_s)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

~~**A**~~  
~~**i**~~  
~~**n**~~  
~~**Y**~~  
~~**N**~~  
~~**E**~~

$D \geq n < n \wedge l_s > D - n \wedge l_i < n \wedge$   
 $2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n - j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$   
 $j_{ik} + l_{sa} - j_{sa}^{ik} \leq j_{sa} \wedge j_i + j_{sa} - s \wedge j_{sa} - j_{sa} \leq j_i \leq n \wedge$   
 $l_{ik} - j_{sa}^{ik} + 1 > s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$   
 $D \geq n < n \wedge I = k_1 \neq 0 \wedge$   
 $j_{sa} = j_{sa}^{i-1} \wedge j_{sa}^{ik} < j_{sa}^{i-1} + 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$   
 $s: \{j_{sa}^s, \dots, k_1, j_{sa}^{i-1}, \dots, j_{sa}, k_3, j_{sa}^i\} \wedge$   
 $s \geq 6 \wedge s \leq n + k \wedge$   
 $\therefore z = 2 \wedge k = k_1 + k_2 + k_3 \Rightarrow$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{\substack{(j_s = l_s + n - D)}}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)} \sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{(j_i+j_{sa}-s)}$$

$$\sum_{n_i=\mathbf{n}+\mathbf{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbf{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbf{k}_2+\mathbf{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbf{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-n_s-j_i+1}^{n_{sa}+j^{sa}-j_i-1}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbf{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbf{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-\mathbf{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j^{sa}-n_{sa}-j^{sa}-\mathbf{k}_2)!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{\left(\right.\left.\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right.\left.\right)}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right.\left.\right)} \sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{\mathbf{n}}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s \\
 & \quad \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa})!} \cdot \\
 & \quad \frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \\
 & \quad \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - i = l_{ik} \wedge l_{sa} + j_{sa} - s > i \wedge$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^l\}$

$s = 6 \wedge s = 14 - \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_i+n+j_{sa}-D-s-1)} \sum_{(j^{sa}=l_{sa}+n-D)}^n \sum_{j_i=l_i+n-D}^n \\
 & \sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
 \end{aligned}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

~~Y~~

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(\mathbf{n} - 1)!}{(n_s + \mathbf{n} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{n})! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - l_s - l_s)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_i + l_i - l_s - l_s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{D}{2}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{( )}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{D}{2}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, \dots, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_i=l_i+n-D}^{l_i+n+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{D-s-1} \sum_{(j_s=j_{ik}+n-D)}^{( )} \sum_{j_i=l_i+n-D}^n$$

$$\sum_{n_i=n+\mathbb{k}}^{n_i=n+\mathbb{k}} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}=n+\mathbb{k}_2-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{l}_i - 1)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (j_i - 1)!} \cdot$$

$$\sum_{\substack{j_{ik} = n + j_{sa}^{ik} - s \\ j_{ik} = n + j_{sa}^{ik} - D - s}}^{\substack{n + j_{sa}^{ik} - s \\ n + j_{sa}^{ik} - D - s}} \sum_{\substack{(j^{sa} - j_{ik} + \mathbf{l}_{sa} - \mathbf{l}_{ik}) \\ j_i = j^{sa} + s - j_{sa}}}^{\substack{(j^{sa} - j_{ik} + \mathbf{l}_{sa} - \mathbf{l}_{ik}) \\ j_i = j^{sa} + s - j_{sa}}} \sum_{\substack{n \\ n_{is} + j_s - j_{ik} - \mathbb{k}_1}}^n$$

$$\sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}}^{\substack{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}} \sum_{\substack{n_{sa} + j^{sa} - j_i - \mathbb{k}_3 \\ n_s = \mathbf{n} - j_i + 1}}^{\substack{n_{sa} + j^{sa} - j_i - \mathbb{k}_3 \\ n_s = \mathbf{n} - j_i + 1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}, j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D}^{n+j_{sa}^{ik}-s} \sum_{j^{sa}=j_{ik}+l_{sa}-s}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}_1}^{(\ )} \sum_{n_{ik}=n+\mathbb{k}_1-j_s}^{(\ )} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_i-n_{ik}+j_{ik}+j_{sa}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3) n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(\mathbf{n}_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n_{ik} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - j_{sa}^{ik} + 1 \wedge$$

$$2 \leq j_s < j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j^{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$- j_{sa}^{ik} - 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{(l_i=n-D)}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_s+1)}^{(n_{is}+j_s-n_i-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n_{is}-j^{sa}+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(j_i+1)}^{(n_{sa}-j^{sa}+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_i - \mathbb{k}_1 - 1)!}{(j_i - j_s - 1)! \cdot (n_i + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(\mathbf{n}-s+1)} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+s-i}^{\mathbf{n}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i-k_1+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa}-n_{is}+j^{sa}-j_i-\mathbb{k}_3)!}{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1) \cdot n_s=n-j_i+\mathbb{k}_3+1}.$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!}.$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1) \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(\mathbf{n}-s+1)} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{n})! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - l_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} \leq j_{sa} - j_{sa}^{ik} \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - s > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbf{0} \wedge 0 \wedge$$

$$j_s^i = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{ \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa} \} \wedge$$

$$\geq 6 \wedge I \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_1 = \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{l}_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_i+\mathbf{n}-D}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - j^{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_{ik} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{n}{2}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{n}{2}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\binom{n}{2}} \sum_{j_i=l_i+n-D}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{\substack{( ) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}^{\sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}} \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + \mathbf{n} - D)}$$

$$\sum_{j_{ik} = l_{ik} + \mathbf{n} - D}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = l_i + \mathbf{n} + j_{sa} - D - s)}^{(n + j_{sa} - s)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_{sa})! \cdot (j_{sa} - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(j_s + j_{sa} - l_{ik} - l_s)! \cdot (l_{ik} - j_s - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa} - l_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{i_k=j^{sa}+j_{sa}^{ik}-j_{sa}}^{n+j_{sa}-s} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = l_{ik} - D}^{(j_{sa}^{ik} - D) - 1} \sum_{(j^{sa} = l_i + n + j_{sa} - D - s)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}}^{n_i - j_s + 1} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{sa} - j_{sa})!}.$$

$$\frac{(D - n - l_i)! \cdot (n - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{\substack{j_{ik}=l_i+j_{sa}^{ik}-D-s \\ n_{ik}=\mathbf{n}+\mathbb{k}-(n_{is}+j_s-j_{sa}^{ik})}}^{\substack{n+j_{sa}^{ik}-s \\ (n+j_s-j_{sa}^{ik})}} \sum_{\substack{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa} \\ n_{is}=\mathbf{n}+\mathbb{k}-(n_{ik}+j_{ik}-\mathbb{k}_1)}}^{\substack{(n_i-j_i) \\ n_{is}+j_s-j_{ik}-\mathbb{k}_1}} \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\substack{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3) \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{\substack{j_{ik} = l_i + n + j_{sa}^{ik} - s \\ j_{sa} = j_{ik} - j_{sa}^{ik} - j_{sa}}} \sum_{\substack{j_i = j^{sa} + l_i - \mathbf{l}_{sa} \\ j_{ik} = l_i + n + j_{sa}^{ik} - s \\ j_{sa} = j_{ik} - j_{sa}^{ik} - j_{sa}}}$$

$$\sum_{n_{is} = n + j_{sa}^{ik} - s}^n \sum_{\substack{(n_{is} = n + j_{sa}^{ik} - s) \\ (n_{ik} = n_{is} + j_s - j_{ik} - \mathbf{k}_1)}} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbf{k}_1}$$

$$\sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbf{k}_2}^{\mathbf{n}} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbf{k}_3}$$

$$\frac{(n_i + j_{ik} - j_i - j^{sa} - s - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3 - j_{sa}^{ik})!}{(\mathbf{n} - \mathbf{n} - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \leq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbf{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-1)}^{(l_i+n-D-s)} \\
 &\quad \sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=l_i+n+j_{sa})}^{(n+j_{sa}-s)} \sum_{i_i=j^{sa}-l_{ik}+1}^{i_i=j^{sa}-l_{sa}} \\
 &\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{sa}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
 &\quad \sum_{(n_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2-\mathbb{k}_3+1)}^{(n_{ik}-n_{sa}-j^{sa}-\mathbb{k}_1-\mathbb{k}_3+1)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_3} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 &\quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_t+n-D-s+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i-k_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \frac{(n_{ik}+j_{ik}-j^{sa}-j_{sa}^{ik}-j_i-\mathbb{k}_3)!}{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1) \quad n_s=n-j_i+\mathbb{k}_1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1) \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1) \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_t+n-D-s+1)}
\end{aligned}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - s)! \cdot (j_s - 2)!}$$

$$\frac{(D - \mathbf{n})!}{(D + j_s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq \mathbf{n} \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - s > \mathbf{l}_{ik} \wedge \mathbf{l}_{sa} + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{E} = 0 \wedge$$

$$j_{sa}^i = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{ \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, \dots, \mathbf{n} \} \wedge$$

$$z \geq 6 \wedge z \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_1 = \mathbb{k}_2 = \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{l}_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - \mathbb{k}_1 - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_{ik} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{n}{2}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{n}{2}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\binom{n}{2}} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_l} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + \mathbf{n} - D)}$$

$$\sum_{j_{ik} = l_{ik} + \mathbf{n} - D}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = l_{sa} + \mathbf{n} - D)}^{(\mathbf{n} + j_{sa} - s)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_{ik})! \cdot (j_{ik} - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - l_s - j_{sa} + 1)!}.$$

$$\frac{(j_{ik} + j_{sa} - l_{ik} - l_s)! \cdot (l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j^{sa} - l_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, \dots, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + \mathbf{n} - D)}$$

$$\sum_{j_{ik} = l_k + \mathbf{n} - D}^{n + j_{sa}^{ik}} \sum_{(j^{sa} = l_{sa} + \mathbf{n} - D)}^{j_{sa} - 1} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{n + j_{sa} - s}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^{n_i - j_s + 1} \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{ik} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{\substack{j_{ik}=l_{sa}+\dots+j_{sa}^{ik}-D-j_{sa} \\ n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+1}}^{\sum_{n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+1}^{n+j_{sa}^{ik}-s}} \sum_{\substack{(n_{ik}+j_{ik}-j_{sa}^{ik}) \\ (n_{ik}+j_{ik}-j_{sa}^{ik})}}^{\sum_{\substack{(n_{ik}+j_{ik}-j_{sa}^{ik}) \\ (n_{ik}+j_{ik}-j_{sa}^{ik})}}} \sum_{\substack{j_i=j^{sa}+l_i-l_{sa} \\ n_{is}=\mathbf{n}+\mathbb{k}_1-j_{ik}+1}}^{\sum_{\substack{j_i=j^{sa}+l_i-l_{sa} \\ n_{is}=\mathbf{n}+\mathbb{k}_1-j_{ik}+1}}} \\ \sum_{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}}^{\sum_{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}}} \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}^{\sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - \mathbf{l}_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{s=1}^{\mathbf{n}} \sum_{\substack{j_s = j_{ik} - j_{sa}^{ik} + \\ j_{sa}^{ik} - s}} \sum_{\substack{j_{sa} = j_{ik} - j_{sa} - j_{sa}^{ik} \\ j_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbf{k}_1}}$$

$$\sum_{n_{is} = 1}^n \sum_{\substack{(n_{is} = n + j_{sa} - j_{sa}^{ik} + 1) \\ (n_{is} = n_{ik} + j_{ik} - j^{sa} - \mathbf{k}_1)}} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbf{k}_1}$$

$$\sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbf{k}_2} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbf{k}_3}$$

$$\frac{(n_i + j_{ik} - j_i - j^{sa} - s - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3 - j_{sa}^{ik})!}{(\mathbf{n} - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbf{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \\
 &\quad \sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=l_{sa}+n-D)}^{(n+j_{sa}-s)} i_i=j^{sa}-j_{ik}-l_{sa} \\
 &\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} n_{ik}=n_{sa}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1 \\
 &\quad \sum_{(n_{ik}-n_{sa}-j^{sa}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)}^{(n_{ik}-n_{sa}-j^{sa}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)} n_s=n-j_i+1 \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - j_{sa} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 &\quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{n-s+1} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(n-s+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^ik-1}^{n+j_{sa}^ik-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^ik)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \frac{(n_{ik}+j_{ik}-j^{sa}-j_{sa}^ik-j_i-\mathbb{k}_3)!}{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j_{sa}+1) \quad n_s=n-j_i+1} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \\
& \frac{(n_{sa}-n_s-1)!}{(j^{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
& \frac{(l_{ik}-l_s-j_{sa}^ik+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^ik+1)!} \\
& \frac{(l_{sa}+j_{sa}^ik-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^ik-j_{ik}-j_{sa})!} \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{n-s+1} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{(n-s+1)}
\end{aligned}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_i)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - s = l_{ik} \wedge l_i \wedge j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{I}_{\mathbf{n} = 0} \wedge$$

$$j_{sa}^i = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{ \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, \dots, d \} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_1 = \mathbb{k}_2 = \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{l_{sa}+j_{sa}-s} \sum_{j_i=s+1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} - \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\quad)}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{n} \sum_{(j^{sa}=j_{sa}+1)}^{(\mathbf{l}_{sa})} \sum_{j_i=\mathbf{l}_{sa}+j_{sa}-s+1}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(-1)!}{(n_s + l_s - \mathbf{n} - 1)! \cdot (n_s - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{n} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i + l_s - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{D}{2}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{\binom{D}{2}}$$

$$\sum_{j_{ik} = j^{sa} + l_{ik} - l_{sa}}^n \sum_{(j^{sa} = j_i + j_{sa} - s)}^{\binom{D}{2}} \sum_{j_i = s+1}^{l_{sa} + j_{sa} - s}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^n$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{\binom{D}{2}} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{\binom{D}{2}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
S_{j_s, j_{ik}, l_i, l_s} &= \sum_{k=1}^n \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{} \sum_{(j_{ik}=j^{sa}+l_{ik}-l_{sa})}^{} \sum_{(j^{sa}=j_{sa}+1)}^{} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-s} \\
&\quad \sum_{n_{ik}=n+j_{ik}-\mathbb{k}_1}^{} \sum_{n_{sa}=n+\mathbb{k}-j_s+1}^{} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{} \sum_{n_{is}=n+j_{ik}-\mathbb{k}_1}^{} \\
&\quad \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{} \sum_{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
&\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot
\end{aligned}$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\lfloor \frac{n}{2} \rfloor} \sum_{\substack{(j_s=j_{sa}+l_s-l_{ik}) \\ (l_{ik}+j_{sa}-j_{sa}^{ik})}} \sum_{j_{ik}=j^{sa}+l_{ik}-1}^{(l_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j^{sa}=j_{sa}+j_{ik}-s+1)}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{n+\mathbb{k}_1-j_s+n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_{ik}-\mathbb{k}_1)+j_{sa}-\mathbb{k}_3} \sum_{(n_{ik}-\mathbb{k}_1-j^{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{i_k}-j^{sa}+1)} n_s=n-j_i+1$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\left(\right)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{\left(\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-s)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - l_s - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_i + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = 1 \wedge l_{sa} + j_{sa}^{sa} - j_{sa}^{ik} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k}_1 = 0 \wedge$$

$$j_{sa} = j_{sa}^{sa} - 1 \wedge j_{sa}^{ik} < j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^{sa}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_{sa}+1)}^{\infty} \sum_{j_i=s+1}^{l_s+s-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{sa}+j^{sa}-j_i-1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j^{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_{sa}+1)}^{\infty} \sum_{j_i=l_s+s}^{l_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

gündün

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

$$(l_s - l)! \\ - j_s - 1) \cdot (\mathbf{n} - j_i)!$$

$$\frac{(l_s - l)!}{- j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_i - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa} - 1) \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{(\ )}{( )}} \sum_{j_i=s+1}^{l_s+s-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$S_{i_k, l_k, l_s, l_i, j_i} = \sum_{k=1}^{\binom{n}{2}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{n} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{\substack{j_{ik} = j^{sa} + l_{ik} \\ j_{ik} = j_{sa} + l_{ik}}}^{\left(\begin{array}{c} l_{sa} \\ j_{sa} \end{array}\right)} \sum_{j_i = j^{sa} + s - j_{sa}}^{\left(\begin{array}{c} l_s \\ j_s \end{array}\right)}$$

$$\sum_{\substack{j_{ik} = n + \mathbb{k}_1 \\ j_{ik} = n + \mathbb{k}_2 \\ j_{ik} = n + \mathbb{k}_3 - j_s + 1}}^{\left(\begin{array}{c} n_i - j_i - 1 \\ n_i \end{array}\right)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{\left(\begin{array}{c} n_i - j_i - 1 \\ n_i \end{array}\right)}$$

$$\sum_{\substack{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3)}}^{\left(\begin{array}{c} n_i - j_i - 1 \\ n_i \end{array}\right)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{\left(\begin{array}{c} n_i - j_i - 1 \\ n_i \end{array}\right)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=1}^{\infty} \sum_{(j_s, j_{ik}, l_s, l_{ik})} \frac{( )}{(l_{ik}+j^{ik}-s)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j^{ik}-s)} \frac{(l_{ik}+j^{ik}-s)}{(j_{ik}-j_{sa}+1)} j_i=j^{sa}+s-j_{sa} \\
 & \sum_{n_l=n}^{n_{is}} \frac{(n_{is}+1)}{(n_{is}=n+l_{ik}-1)} n_{ik}=n_{sa}+j^{sa}-j_i-\mathbb{k}_1 \\
 & \sum_{(n_{sa}=n_{is}-j^{sa}+1)}^{(l_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \frac{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(2)!(n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - 
 \end{aligned}$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\left(l_{ik}+j_{sa}^{ik}-s\right)} \sum_{(j^{sa}=j_{sa}+1)}^{\left(n_i-j_s+1\right)} \sum_{j_i=j^{sa}+s-1}^{\left(n_i-k_1\right)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\left(n_i-j_s+1\right)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{\left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(n_{sa}=n_{sa}+j^{sa}-j_i\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2 - \mathbb{k}_1 - j_{sa})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - j_{sa})!} \cdot \frac{(l_s - 2)!}{(\mathbb{k}_1 - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = \mathbf{n} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} < l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^{i-1} \wedge j_{sa}^{ik} < j_{sa}^{i-1} + 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^{i-1}, \dots, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s < s + \mathbb{k} \wedge$$

$$z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

**gündün**

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+j_{ik}-1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \quad \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
 & \quad \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
 & \quad \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
 & \quad \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j^{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\
 & \quad \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \quad \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
 & \quad \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
 & \quad \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \quad \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
 & \quad \sum_{k=1}^{\binom{l_i}{2}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{l_i}{2}} \\
 & \quad \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i} \\
 & \quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_i}
 \end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left.\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\ \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left.\right)} \sum_{l_i}^{\left(\right.}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right.} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i} \\$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - \mathbb{k}_3)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\lfloor \frac{D}{2} \rfloor} \sum_{\substack{( ) \\ (j_s = j_{ik} + l_s - l_{ik})}} \sum_{\substack{( ) \\ (l_{sa} + j_{sa}^{ik} - j_{sa})}}$$

$$\sum_{k=j_{sa}^{ik}+1}^{\lfloor \frac{D}{2} \rfloor} \sum_{\substack{( ) \\ (j^{sa} = j_{ik} + l_{sa} - l_{ik})}} \sum_{\substack{( ) \\ (j_i = j^{sa} + s - j_{sa})}}$$

$$\sum_{n_i=n+\mathbb{k}}^{\lfloor \frac{D}{2} \rfloor} \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+\mathbb{k}-j_s+1)}} \sum_{\substack{(n_i-j_s+1) \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}}$$

$$\sum_{\substack{( ) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \sum_{\substack{( ) \\ (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& f(z) = \sum_{j_{ik}=j_{sa}^{ik}+1}^{\infty} \sum_{j_{sa}=j_{sa}^{ik}+l_{sa}-l_{ik}}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^{\infty} \\
& \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{\infty} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\infty} \sum_{n_s=n-j_i+1}^{\infty} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.
\end{aligned}$$

gündin

YAF

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\mathbf{l}_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{sa})}^{\left(\right)} \sum_{(j_i=j^{sa}-j_{sa})}^{\left(\right)} \sum_{n_i=n+\mathbb{k}_1+(j_{ik}-j_{sa})+1}^n \sum_{n_{ik}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_1}^{\left(\right.} \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)+1}^{\left(\right.} n_{ik}+j_s-j_{ik}-\mathbb{k}_1 \\ \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)+1}^{\left(\right.} n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa})!}{(n_i - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{sa} + j_{sa} - j^{sa} - s - j_{sa})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge \mathbf{l}_i = 2 + s - \mathbf{l}_{sa} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s - j_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge J = \mathbb{k} > 0 \wedge$$

$$- j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i-k_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa}-s+1)!}{(n_{sa}=n+\mathbb{k}_3-j_s-1)!} \cdot \frac{j_i-\mathbb{k}_3}{n_s=n-j_i+\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_i - n_{is} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1) \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 1)!}{(l_s - 1) \cdot (l_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} \wedge j_{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i - n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - i = l_{ik} \wedge l_{sa} + j_{sa} - s > 0 \wedge$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^i < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^l\}$

$s = 6 \wedge s = 7 \wedge \mathbb{k} \wedge$

$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{sa} - j_{sa} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+k_3-j_{ik}+1}^{n_i+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - 1)!}{(j_s - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{ik} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_{sa}-j_{sa}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_l-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$S_{\mathbf{l}_s, \mathbf{l}_i, \mathbf{l}_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_k=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(\mathbf{l}_i - \mathbf{l}_s)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{\substack{i_k = 1 \\ i_k = j_s + l_{ik} - l_s}}^{\mathbf{l}_{ik}} \sum_{\substack{i_s = 2 \\ i_s = j_{sa} + l_{sa} - l_{ik}}}^{j_{sa}^{ik}}$$

$$\sum_{\substack{i_k = j_s + l_{ik} - l_s \\ i_k = j_{sa} + l_{sa} - l_{ik}}}^{\mathbf{l}_{ik}} \sum_{j_i = j^{sa} + s - j_{sa}}^{j_i}$$

$$\sum_{\substack{i_k = j_s + l_{ik} - l_s \\ i_k = j_{sa} + l_{sa} - l_{ik} \\ i_k = n + \mathbb{k} \\ (n_{is} = n + \mathbb{k} - j_s + 1)}}^{\mathbf{l}_{ik}} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_i - 1)}$$

$$\sum_{\substack{() \\ (n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}}^{\mathbf{l}_{sa}} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{(n_i - j_i - 1)}$$

$$\frac{(n_i + j_i + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i + j_i + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\mathbf{n} \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{s=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=i-k+l_s-l_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_i+s+1)}^{(j_{sa})} \sum_{j_i=l_i+n-D}^{(j_{sa})}$$

$$\sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{ik}=n+\mathbb{k}-j_s+1)}^{(n_{ik}+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_{ik}+\mathbb{k}_1)}$$

$$(n_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2) \sum_{(n_{sa}=n_{i-s}-j^{sa}+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} n_s=n-j_i+1$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\binom{D}{n}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{\binom{l_{sa}}{n}} \sum_{j_i=l_{sa}+s-j_{sa}+1}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j_s+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{n_s=\mathbf{n}-j_i}^{n_{sa}+j_i-j_{ik}-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{ik} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{D}{n}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{l_{sa}}{n}} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \\
 \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s}^{(n_i-j_s+1)} \\
 \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\begin{aligned}
 & D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge \\
 & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} \wedge j_{sa}^{ik} - j_{sa} \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i - n \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - i = l_{ik} \wedge l_{sa} + j_{sa} - s > 0 \wedge \\
 & D + s - n < l_i \leq D + l_s - n - 1 \wedge
 \end{aligned}$$

$$\begin{aligned}
 & D \geq n < n \wedge I = \mathbb{k} > 0 \wedge \\
 & j_{sa} = j_{sa}^i - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^{i-1} = j_{sa}^{i-1} - 1 \wedge \\
 & s \in \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{i-1}, \dots, \mathbb{k}_2, j_{sa}^{i-2}, \mathbb{k}_3, j_{sa}^i\} \wedge \\
 & s \geq 6 \wedge s = s + \mathbb{k} \wedge \\
 & \mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow
 \end{aligned}$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(j_i+j_{sa}-s) \quad l_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(j_i+j_{sa}-s) \quad l_{ik}+s-j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s) \quad l_{ik}+s-j_{sa}^{ik}} \sum_{j_i=l_i+n-D}^{(j_i+j_{sa}-s) \quad l_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{is}+j^{sa}-\mathbb{k}_1-1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - l_s)!}{(j_s - 1)! \cdot (n - j_i)!}.$$

$$\frac{(l_s - l_s)!}{(j_s - 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\left(\right.\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\left.\right.)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j^{sa}=j_{sa}+1)}^n \sum_{j_i=l_{ik}+s-j_{sa}^{ik}+1}^n$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{is}+j^{sa}-\mathbb{k}_1-1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (l_s - 2)!} \cdot$$

$$\frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{\left(\right)}$$

$$\sum_{i=j^{sa} + l_{ik} - l_{sa}}^n \sum_{(j^{sa} = j_i + j_{sa} - s)}^{\left(\right)} \sum_{j_i = l_i + \mathbf{n} - D}^{l_{ik} + s - j_{sa}^{ik}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{l_{ik} + s - j_{sa}^{ik}}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{\left(\right)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{\left(\right)} \sum_{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& S_{j_s, j_{ik}, j_i, l_i} = \sum_{k=1}^{n_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(j_s=j_{ik}-s)} \sum_{j_i=l_i+n-D}^{l_s+s-1} \\
& \sum_{i_k=j^{sa}+l_{ik}-1}^{n} \sum_{(j^{sa}=j_{sa}+1)}^{(j^{sa}=j_{sa}-1)} \sum_{n_i=n+\mathbb{k}-j_s+1}^{n_i+\mathbb{k}} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1)} \sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=n-j_i+1}^{n_i-n_{is}-1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.
\end{aligned}$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=1}^{\binom{n}{2}} \sum_{\substack{(j_s = j_{ik} - l_s - l_{ik}) \\ (l_s + j_{ik} - l_{sa} - j_{sa} + 1)}} \Delta$$

$$\sum_{j_{ik} = j^{sa} + l_{ik} - l_{sa}}^{\binom{n}{2}} \sum_{\substack{(l_s + j_{ik} - l_{sa} - j_{sa} + 1) \\ (j_i = l_s + j_{sa} - l_{sa} + 1)}} \Delta$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{\substack{(n_{is} = n + \mathbb{k}_2 - j_s + 1) \\ (n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1)}} \Delta$$

$$\sum_{\substack{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1) \\ (n_s = n - j_i + 1)}} \Delta$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\left(\right)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_i=l_i+n-D}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{\left(\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-s)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_{sa}-s}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_2 - l_i - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - l_i - \mathbb{k}_2)! \cdot (\mathbf{n} - l_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(D - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_i \wedge l_{sa} - j_{sa}^{ik} - l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D - n < l_i \leq D - l_s + s - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_{sa}+1)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n-D}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{is}+j_s-j_i+1}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_i-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j^{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_i)! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=1}^{\left(\phantom{j}\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{sa})} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{n} \sum_{j_i=j^{sa}+s-j_{sa}}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

$$(l_s - l)!.$$

$$\frac{(l_s - l)!}{(-j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{ik} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_l-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{\mathbf{n}}{\mathbf{l}_s}} \sum_{(j_s = j_{ik} + \mathbf{l}_s - \mathbf{l}_{ik})}$$

$$\sum_{j_{ik} = j^{sa} + \mathbf{l}_{ik} - \mathbf{l}_{sa}}^{n} \sum_{(j^{sa} = j_{sa} + 1)}^{(l_i + n + j_{sa} - D - s - 1)} \sum_{j_i = l_i + n - D}^{n}$$

$$\sum_{n_i = n + \mathbb{k}}^{n} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) = (n_{sa} + j^{sa} - j_i - \mathbb{k}_3)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(\mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (j_i)!} +$$

$$\sum_{\substack{j_{ik}=s-a+l_{ik}-l_{sa} \\ (l_{ik}+j_{ik}-l_{sa})=n+j_{sa}-D-s}} \sum_{\substack{(l_{ik}+j_{ik}-l_{sa}) \\ (j^{sa}=n+j_{sa}-D-s)}} \sum_{\substack{n \\ j_i=j^{sa}+s-j_{sa}}} \sum_{\substack{( ) \\ (j_{ik}+j_{sa}-l_{ik})}}$$

$$\sum_{\substack{n+\mathbb{k} \\ (n_{is}=n+\mathbb{k}-j_s+1)}} \sum_{\substack{(n_i-j_s) \\ (n_{ik}=n+\mathbb{k}_2+k_3-j_{ik}+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ (n_{sa}=n+\mathbb{k}_3-j^{sa}+1) \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{sa})}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D)}^{\infty} \sum_{(j^{sa}=j_{sa}-j_{ik})}^{\infty}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_i-j_s+1)}^{\infty} \sum_{(n_{ik}=n_i-j_s-j_{ik}-\mathbb{k}_1)}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{\infty}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa})!}{(n_i - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 1) \cdot (\mathbf{n} + j_{sa} + j_{sa} - j^{sa} - s - j_{sa})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_s = \mathbf{n} - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - \mathbf{n} - l_i \leq D + l_s + s - \mathbf{n} - 1 \wedge$$

$$n - l_s \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_i+n+j_{sa}-D-s-1)} \sum_{(j^{sa}=j_{sa}+1)}^{n} \sum_{j_i=l_i+n-1}^{n}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_{ik}-\mathbb{k}_1=n-i_k+1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{\mathbb{k}_2=j^{sa}+1, \dots, n_s=n-j_i+1}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{n_{sa}+j_{ik}-\mathbb{k}_3=n-i_k+1}^{n_{sa}+j_{ik}-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is})!}{(j_s - 2, n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{is} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-1)} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{n} \sum_{j_i=j^{sa}+s-j_{sa}}^{n}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - \mathbb{k}_1 - 1)!}{(j_{ls} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_{ls} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - n_s + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} - \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{(\mathbf{l}_s+j_{sa}-1)} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right. \left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{\mathbf{n}}{\mathbf{l}_s}} \sum_{(j_s = j_{ik} + \mathbf{l}_s - \mathbf{l}_{ik})}^{\binom{\mathbf{n}}{\mathbf{l}_s}}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_i + n + j_{sa}^{ik} - D - s - 1} \sum_{(j^{sa} = j_{ik} + \mathbf{l}_{sa} - \mathbf{l}_{ik})}^{\binom{\mathbf{n}}{\mathbf{l}_s}} \sum_{j_i = l_i + \mathbf{n} - D}^{\mathbf{n}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 1)!}{(l_s - j_{si})! \cdot (j_{si} - 2)!} \cdot$$

$$\frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i - j_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\mathbf{n}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{\left(\right)}$$

$$\sum_{j_{ik}=l_i+j_{sa}-l_{ik}}^{j_{ik}+j_{sa}-l_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{\mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa}} \binom{j_s = j_{ik} + l_s - k}{\mathbf{n}}$$

$$\sum_{\substack{i_{ik} = l_i + j_{sa} - D - s \\ i_{ik} \leq n + j_s - D - s}}^{\mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa}} \binom{( )}{j^{sa} + l_{sa} - l_{ik} - j_{ik}}$$

$$\sum_{\substack{n = n + \mathbb{k} \\ n_{is} = n + j_s - 1}}^n \sum_{\substack{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1 \\ n_{ik} \leq n_{is} + j_s - j_{ik} - \mathbb{k}_1}}^{n_i - j_s + 1} \sum_{\substack{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2 \\ n_{sa} \leq n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}}$$

$$\sum_{\substack{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_3 \\ n_{sa} \leq n_{sa} + j^{sa} - j_i - \mathbb{k}_3}}^{n_i - j_s + 1} \sum_{\substack{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3 \\ n_s \leq n_{sa} + j^{sa} - j_i - \mathbb{k}_3}}$$

$$\frac{(n_i + j_i - j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D > \mathbf{n} \wedge \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_{sa}-j_{ik}+l_s-l_s)}^{\binom{n}{l_i}} \frac{(n-j_{sa}+j_{ik}-\mathbb{k}_1) \cdot (n-j_{sa}+j_{ik}-\mathbb{k}_2) \cdot (n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}{(n_{sa}-n_{ik}-j^{sa}+1) \cdot n_s=n-j_i+1} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

gündemi

$$\sum_{k=1}^{\mathbf{l}_{ik}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=\mathbf{l}_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{\mathbf{l}_{ik}} \sum_{(j^{sa}=j_{ik}+\mathbf{l}_{sa}-\mathbf{l}_{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_i-k_1+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa})!}{(n_{sa}+j_i-j_{ik}-\mathbb{k}_3)!} \cdot \frac{n_{sa}+j_i-j_{ik}-\mathbb{k}_3}{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j_i+1) \quad n_s=n-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!}.$$

$$\frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\mathbf{l}_{ik}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=\mathbf{l}_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{\mathbf{l}_{ik}} \sum_{(j^{sa}=j_{ik}+\mathbf{l}_{sa}-\mathbf{l}_{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} \wedge j_{sa} - s > 0 \wedge$$

$$D + s - n < l_i \leq D + l_s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^i < j_{sa} - 1 \wedge j_{sa}^i - j_{sa}^{ik} = 1 \wedge$$

$$s \in \{j_{sa}^i, \dots, \mathbb{k}_1 - j_{sa}^{ik}, \dots, \mathbb{k}_2 - j_{sa}^{ik}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_s=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=l_i+n-D}^n$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=l_i+n-D}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_i+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{j_{ik} = l_i + \dots}^{+j_{sa}^{ik}-1} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{\infty} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& f_z S_{j_s, j_{sa}, j^{sa}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \\
& \sum_{j_s+l_{ik}-l_s}^{n} \sum_{j=j_{ik}+l_{sa}-l_{ik}}^{(j_i+l_{ik}-l_s+1)} \sum_{j_i=l_i+n-D}^{n} \\
& \sum_{n_{ik}=n+\mathbb{k}-j_s+1}^{n} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot
\end{aligned}$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=1}^{\min(j_s, l_{sa}+1)} \sum_{(j_s=l_t+i, l_{sa}=l_s-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{n} \sum_{(j^{sa}=j_{ik}+l_{sa}-s+1)}^{n_{sa}} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_i}$$

$$\sum_{n_i=n+\mathbb{k}_1}^{n} \sum_{n_{is}=n+\mathbb{k}_2-j_s}^{n_{sa}} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{sa}}$$

$$\sum_{(n_{ik}=j_{ik}-j^{sa}-s+1)}^{(n_{sa}=n_{ik}-j^{sa}+1)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_{sa}-j_{sa}+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right.} \sum_{j_i=j^{sa}+s-j}^{\left.\right)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\left(\right.} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{\left.\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-s)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_{ik}-s}^{\left.\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_2 - l_i - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - l_i - \mathbb{k}_2)! \cdot (\mathbf{n} - l_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(n_i - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa}^{ik} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{sa} - j_{sa}^{ik} + 1 \leq l_i \wedge l_{sa} - j_{sa}^{ik} - l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D - n < l_i \leq D - l_s + s - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=l_i+n-D}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{is}-j_i+1}$$

$$\frac{(n_i - 1)!}{(j_s - 2) \cdot (n_i - n_{is} + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1) \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1) \cdot (n_{ik} + j^{sa} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1) \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_i+n-D-s+1)}^{n_{ik}}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\sum_{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}} \sum_{n_s=\mathbf{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - \mathbb{k}_2)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - 1)!}{(l_s - 2)! \cdot (j_s - 1)!}.$$

$$\frac{(l_s - 2)!}{(l_s - 2)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_i + \mathbf{n} - D - s + 1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(\mathbf{l}_i + \mathbf{n} - D - s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=l_i+n-D}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(\mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (j_i)!} +$$

$$\sum_{\substack{j_{ik}=j_s+l_{ik}-l_s \\ j_{ik}=n+\mathbb{k}}} \sum_{\substack{(i=i_s+1) \\ (i=n-\mathbb{k}-j_s+1)}}^{\mathbf{l}_s} \sum_{\substack{j_i=j^{sa}+s-j_{sa} \\ j_i=n-k_1}}^n$$

$$\sum_{\substack{j_{ik}=j_s+l_{ik}-l_s \\ j_{ik}=n+\mathbb{k}}} \sum_{\substack{(i=i_s+1) \\ (i=n-\mathbb{k}-j_s+1)}}^{\mathbf{l}_s} \sum_{\substack{j_i=j^{sa}+s-j_{sa} \\ j_i=n-k_1}}^n$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{l}_s} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_s)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s}^{n_i} \sum_{(j^{sa} = j_{ik} + l_{sa} - 1)}^{(n_i - j_s + 1)} \sum_{(j_i = j^{sa} - l_i - j_{sa})}^{(n_i - j_s + 1)}$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(j_{ik} = j_i + \mathbb{k}_1 + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = j_i + j_s - j_{ik} - \mathbb{k}_1)}^{(n_i - j_s + 1)}$$

$$\sum_{(n_{sa} = n_{ik} + l_{sa} - j^{sa} - \mathbb{k}_2)}^{(n_i - j_s + 1)} \sum_{(n_i = n_{sa} + j^{sa} - j_i - \mathbb{k}_3)}^{(n_i - j_s + 1)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - j_s + 1 - \mathbb{k}_2 - \mathbb{k}_3 - 1)! \cdot (n + j_i + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i = D + s - 1 \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = j_s - j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge l_i = \mathbb{k} > 0 \wedge$$

$$j_i = j^{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\infty} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i-k_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{j_i=k_1+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa}-j_i+k_1-j_i-\mathbb{k}_3)!}{(n_{sa}=n+\mathbb{k}_3-j_s+1) \cdot n_s=n-j_i+k_1-j_i-\mathbb{k}_3} \cdot$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-j_s-j_i+1)!} \cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j^{sa}-j_s-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\infty} \sum_{j_i=l_{ik}+j_{sa}^{ik}-s+1}^{l_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - \mathbb{k}_1 - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_{ik} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\mathbf{l}_{sa}-\mathbf{l}_i)}^{\binom{(\ )}{( )}} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{l_{ik}+j_{sa}^{ik}-s}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{n_s}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathfrak{l}_s - 2)!}{(\mathfrak{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - l_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathfrak{l}_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots + \mathbb{k}_s \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + l_{sa} - l_i)}^{(\ )} \sum_{j_i = s + 1}^{l_s + s - 1}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} + j_{sa} - j_{ik} - \mathbf{l}_{sa} + \mathbf{l}_s - l_{ik})!}.$$

$$\frac{(\mathbf{l}_s - l_i)!}{(\mathbf{l}_s - n - \mathbf{n} + 1) \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{i=1}^{\mathbf{n}} \sum_{\substack{j_s = j_{ik} + l_s - l_{ik}}}^{l_s + j_{sa}^{ik}}$$

$$\sum_{\substack{s=1 \\ j^{sa}+1}}^{l_s + j_{sa}^{ik}} \sum_{\substack{( ) \\ n_{sa}=j_i+l_{sa}-l_i}} \sum_{j_i=l_s+s}^{l_i}$$

$$\sum_{\substack{i=1 \\ n_{is}=n+\mathbb{k}-j_s+1}}^{(n_i-j_s+1)} \sum_{\substack{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1 \\ n_{sa}=n+\mathbb{k}_3-j^{sa}+1}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=1}^{\infty} \sum_{\substack{(j_s=j_{ik}-l_s-l_{ik}) \\ j_{ik}=j^{sa}-l_{sa}}} \sum_{\substack{(s-1) \\ (j^{sa}-l_{sa}-l_i) \\ j_i=s+1}} \sum_{\substack{(n-i_s+1) \\ (n_i=n+\mathbb{k}-j_s) \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}} \sum_{\substack{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3) \\ (n_i=n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2)}} \sum_{\substack{(n_s=n_{sa}+j^{sa}-j_{sa}-\mathbb{k}_3) \\ (n_i+j_{ik}+j_{sa}-j^{sa}-s-j_{sa})! \\ (n_i-n_{ik}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)! \cdot (\mathbf{n}+j_{ik}+j_{sa}-j^{sa}-s-j_{sa})!}} \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\begin{aligned} & \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge \\ & 1 \leq j_s \leq j_{ik} - \mathbf{l}_{ik} + \mathbf{l}_s \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & \mathbf{l}_{ik} - j_{sa}^{ik} = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge \\ & D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge \end{aligned}$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{D}{2}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}}^{n_{is}+j_{ik}-\mathbb{k}_1} \sum_{+ \mathbb{k}_1 - l_{ik}+1}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{(j_{sa}+1)}^{n_{sa}+j^{sa}-j_{sa}-\mathbb{k}_3} \sum_{=n-j_i+1}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} + j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} + j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_i - n_{is} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\binom{D}{2}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=l_{ik}+j_{sa}^{ik}-s+1)}^{(l_{sa})} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{si}=j^{sa}-j_i+1}^{n_{sa}+j^{sa}-j_i-1}$$

$$\frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j^{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!}.$$

$$\frac{(n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left.\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}^{ik}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{sa})} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - 1)!}{(l_s - j_s) \cdot (l_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}-1} \sum_{(j^{sa}=l_s+j_{sa})}^{(l_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}-1 \\ j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}-1}}^{\mathbf{l}_s + j_{sa} - \mathbf{l}_{sa}} \sum_{\substack{j_{sa}=j_{ik}+j_{sa}^{ik}-j_{sa}-1 \\ j_{sa}=j_{ik}+j_{sa}^{ik}-j_{sa}-1}}^{\mathbf{l}_s + j_{sa} - \mathbf{l}_{sa}}$$

$$\sum_{\substack{n=\mathbf{k} \\ n+\mathbf{k}}}^n \sum_{\substack{(n_{is}=n+j_{sa}^{ik}-j_{sa}+1) \\ (n_{is}=n+j_{sa}^{ik}-j_{sa}+1)}}^{\mathbf{l}_i - j_{sa} - \mathbf{l}_{sa}} \sum_{\substack{n_{ik}=n_{is}+j_s-j_{ik}-\mathbf{k}_1 \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbf{k}_1}}$$

$$\sum_{\substack{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2 \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2}}^{\mathbf{l}_s - j_i + 1} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i-\mathbf{k}_3 \\ n_s=n_{sa}+j^{sa}-j_i-\mathbf{k}_3}}$$

$$\frac{(n_i + j_{sa}^{ik} + j_{sa} - j^{sa} - s - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\begin{aligned} & D \geq \mathbf{n} & n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge \\ & 1 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & \mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge \\ & D \geq \mathbf{n} < n \wedge I = \mathbf{k} > 0 \wedge \end{aligned}$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_i)}^{\left(\right)} \\
 &\quad \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-l_{ik})}^{(l_{sa})} \sum_{(j_i=j^{sa}-l_i-l_{sa})}^{\left(\right)} \\
 &\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}_2-\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
 &\quad \sum_{(n_{ik}-n_{sa}-\mathbb{k}_2-\mathbb{k}_3-j_{ik}+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_3-j_i-\mathbb{k}_3)} \sum_{n_s=n-j_i+1}^{\left(\right)} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -
 \end{aligned}$$

$$\sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+l_i-l_{ik}}^{(\ )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-\mathbb{k}_1-j_{ik}-\mathbb{k}_1}^{(\ )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-1)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq n + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_i \leq j_i + j_{sa} - s \wedge j_i - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^{i-1} \wedge j_{sa}^{ik} < j_{sa}^{i-1} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^{i-1}, \dots, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$z \cdot z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(l_{sa})}^{\sum_{j_i=j^{sa}+l_i-l_{sa}}} \sum_{n_i=n+\mathbb{k}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{sa}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-\mathbb{k}_2)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
& \sum_{k=1}^{\sum_{(j_s=j_{ik}+l_s-l_{ik})}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\sum_{(j_i=j^{sa}+l_i-l_{sa})}} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(l_{sa})}^{\sum_{j_i=j^{sa}+l_i-l_{sa}}} \sum_{n_i=n+\mathbb{k}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - l_i) \cdot (l_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right.} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\left.\right)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left.\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned} C_{i_{ik}, j_{ik}, j^{sa}, j_{sa}} &= \sum_{s=1}^{l_s} \sum_{(j_s=2)} \\ &\sum_{i_{ik}=j_s+l_{ik}-l_s} \sum_{(j_i=j_{ik}+j_{sa}-j_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\ &\sum_{\substack{(n_i-j_s) \\ n_i=k}} \sum_{\substack{n_{ik}=n+k-j_s+1 \\ n_{ik}=n+k_2+k_3-j_{ik}+1}} \sum_{\substack{n_{is}+j_s-j_{ik}-k_1 \\ n_{is}=n+k_3-j^{sa}+1}} \\ &\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-k_2) \\ (n_{sa}=n+k_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-k_3 \\ n_s=n-j_i+1}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}. \\ &\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}. \\ &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}. \\ &\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}. \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}. \\ &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}. \end{aligned}$$

gündem

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{\mathbf{l}_s} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{\left(\right)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}, i^{sa}=i_{ik}+j_s-j_{ik}-\mathbf{k}_1)}^{\left(\right)} \sum_{n_i=n+\mathbb{k}(n_i-j_s+1)}^{n} \sum_{n_{ik}=n_i-j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2, i_{sa}=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{\left(\right)} \\ \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})! \cdot (n + j_i + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq n - \mathbf{n} - 1 \wedge$$

$$1 \leq j_{sa} \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} + j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} - \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\ )} \sum_{j_i=l_i+n-1}^{l_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{lk}=n+\mathbb{k}-j_{ik}+\mathbb{k}_1}^{n_{is}+j_{ik}-\mathbb{k}_1} \sum_{j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{j_{sa}^{sa}+1}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{j_{sa}+j^{sa}-j_{sa}=\mathbb{n}-j_i+1}^{n_{sa}+j^{sa}-j_{sa}-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right.} \sum_{j_i=l_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{sa}+j^{sa}-j_i-1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is})+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (j_s-n_i-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j^{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right.} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(\right.} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right.} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{ik}+s-j_{sa}^{ik}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\left(\right.}
\end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left.\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\ \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + s - \mathbf{n} < l_i \leq D + l_s + s - \mathbf{n} - 1$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k}: z = 3 \wedge z = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left.\right)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right.} \sum_{j_i=l_i+\mathbf{n}-D}^{l_s+s-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(-1)!}{(n_s + l_s - \mathbf{n} - 1)! \cdot (n_s - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{n} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - 1)!}{(l_{ik} + l_{sa} - j^{sa} - 1)! \cdot (l_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + l_s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j_{sa}+1}^{l_s+j_{sa}-1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\infty} \sum_{j_i=l_s+s}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{\substack{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa} \\ j^{sa} = j_i + l_i - l_{sa}}} \sum_{\substack{j_i = l_i + \mathbf{n} - D \\ l_s + s - 1}} \sum_{\substack{(n_i - j_i - 1) \\ n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}}$$

$$\sum_{\substack{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}} \sum_{\substack{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa})! \\ (n_i - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa})!}}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$> n - \mathbf{n} \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge l_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{s=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \\
 &\quad \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{l_i=n+j_{sa}-D}^{(l_{ik}+l_s-j_{sa}^{ik})} \sum_{i:=j^{sa}+l_i-l_{sa}} \\
 &\quad \sum_{n_i=n+\mathbb{k}} \sum_{(n_{ik}+1)+\mathbb{k}-j_s+1}^{(n_i-1)+1} \sum_{i=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_{ik}-j^{sa}-\mathbb{k}_2)} \\
 &\quad \sum_{(n_{sa}-j^{sa}+1)}^{(n_{sa}-j^{sa}-\mathbb{k}_3+1)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

guiding

YAF

$$\begin{aligned}
& \sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{n}{s}} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=l_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{\binom{n+j_{sa}-s}{s}} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\binom{n_i-j_s+1}{s}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\binom{n_i-j_s+1}{s}} n_{ik}=n+\mathbb{k}_2-j_{ik}+1 \\
& \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1-j_{sa}+j^{sa}-\mathbb{k}_2-j_i-\mathbb{k}_3)}^{\binom{n_{sa}+j_s-j_{ik}-\mathbb{k}_1}{s}} \\
& (n_{sa}=n+\mathbb{k}_3-j_{sa}+1) \quad n_s=n-j_i+\mathbb{k}_1 \\
& \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!} \cdot \\
& \frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{n}{s}} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{l_{ik}+j_{sa}-j_{sa}^{ik}}{s}} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{\binom{j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}}{s}} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\binom{j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}}{s}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa})!}.$$

$$\frac{(l_s - 1)!}{(l_s - 1) \cdot (l_s - 2)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - l_i - l_s - l_{ik})! \cdot (\mathbf{n} - j_{sa})!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - i > l_{ik} \wedge l_{sa} + j_{sa} - s = \dots \wedge$$

$$D + s - \mathbf{n} < l_i \leq D + l_s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_s+j_{sa}-1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+j_{ik}-\mathbb{k}_1+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$(l_s - l_s)!$$

$$- j_s)! \cdot (j_s - 2)!.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=l_s+j_{sa})}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - \mathbb{k}_3)!}{(j_{ik} + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\lfloor \frac{D}{l_s} \rfloor} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\lfloor \frac{D}{l_s} \rfloor}$$

$$\sum_{j_{ik}=j^{sa}+l_i-j_{sa}}^{\lfloor \frac{D}{l_s+j_{sa}-1} \rfloor} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{\lfloor \frac{D}{l_s+j_{sa}-1} \rfloor} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\lfloor \frac{D}{l_s} \rfloor} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\lfloor \frac{D}{l_s} \rfloor}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\lfloor \frac{D}{l_s} \rfloor} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\lfloor \frac{D}{l_s} \rfloor}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& \epsilon_z S_{j_s, j_{ik}, l_i} = \sum_{k=1}^{( )} (j_s = j_{ik} + l_s - l_s) \\
& l_{ik} + j_{sa}^{ik} - D - s - 1 \quad (j_{sa} = l_i + j_{sa} - s) \quad j_i = j^{sa} + l_i - l_{sa} \\
& i_{ik} = j_{sa}^i \quad (j^{sa} = l_i + j_{sa} - D - s) \quad j_i = j^{sa} + l_i - l_{sa} \\
& n \quad (n_{is} = n + \mathbb{k} - j_s + 1) \quad n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1 \\
& n_{is} + j_s - j_{ik} - \mathbb{k}_1 \quad (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \quad n_{sa} + j^{sa} - j_i - \mathbb{k}_3 \\
& (n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1) \quad n_s = n - j_i + 1 \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.
\end{aligned}$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=1}^{\mathbf{l}_{ik}} \sum_{(j_{sa}=j_{ik}+j_{sa}-\mathbf{l}_s-\mathbf{l}_s)}^{\left(\begin{array}{c} \\ \end{array}\right)} \text{Y}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D}^{l_{ik}} \sum_{(n+j_{sa}-s)}^{(n+k_1-k_2-k_3)} i_i=j^{sa}+l_i-l_{sa}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s+\mathbb{k}_1)}^{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j^{sa}-\mathbb{k}_2)}^{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j_{sa}^{sa}+l_i-l_{ik}}^{(\ )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{(\ )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-1)}^{(\ )} \sum_{n_s=n_{sa}+j_{sa}^{sa}-j_i}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j_{sa}^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j_{sa}^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{sa} - 1 \leq j_{ik} \leq n - j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - s \wedge j_i - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = s \wedge l_{sa} + j_{sa}^{sa} - j_{sa}^{ik} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + n - n < l_i \leq D - l_s + s - 1 \wedge$$

$$\geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^{sa} - 1 \wedge j_{sa}^{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$> 6 \wedge s < s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_t+\mathbf{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_t+\mathbf{n}+j_{sa}-D-s)}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is})! \cdot (n_i-1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=1}^{\binom{\mathbf{n}}{j_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
& \sum_{j_{ik}=l_t+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

guidy

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(l_s - l_s - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - l_s)!}{(j_s - 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\binom{(\ )}{( )}} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} \bullet 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(\mathbf{l}_i + \mathbf{n} - D - s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+\mathbf{l}_{ik}-\mathbf{l}_s}^{n} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_s - 1)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(n+1)-l_s} \sum_{i=j_{sa}+l_i-l_{sa}}^{(\mathbf{l}_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{=j_s+l_{ik}-l_s}^{(n+1)-l_s} \sum_{(j^{sa}+l_i-j_{sa}^{ik})}^{(n+1)-l_s} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(\mathbf{l}_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = \mathbf{l}_i + \mathbf{n} - D - s + 1)}^{\infty} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{\infty} \sum_{(n_i = \mathbf{n} + \mathbb{k}_1 + \mathbb{k}_2 + \dots + \mathbb{k}_3)}^n \sum_{(n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2) \dots (n_{sa} + j^{sa} - j_i - \mathbb{k}_3)}^{\infty} \frac{(n_i + i_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - (\mathbf{n} + i_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik}))!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq n - r - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} + \mathbf{l}_{sa} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} - \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D + s - \mathbf{n} \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_s}$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_{ik}-\mathbb{k}_1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{\mathbb{k}_2=j_{sa}+1}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{ik}-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 + 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{is} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\begin{array}{c} n+j_{sa}-s \\ j_{ik}+j_{sa}-j_{sa}^{ik} \end{array}\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\left(\begin{array}{c} n_i-j_s+1 \\ n_{ik}+j_{ik}-\mathbb{k}_1 \end{array}\right)} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\left(\begin{array}{c} n_i-j_s+1 \\ n_{is}+j_{sa}-j_i-\mathbb{k}_1 \end{array}\right)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\left(\begin{array}{c} n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}+j^{sa}-j_i-\mathbb{k}_1 \end{array}\right)} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{\left(\begin{array}{c} n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}+j^{sa}-j_i-\mathbb{k}_1 \end{array}\right)} \sum_{n_{sa}=j_i+1}^{\left(\begin{array}{c} n_{sa}+j^{sa}-j_i-\mathbb{k}_1 \\ n_{sa}-j_i+1 \end{array}\right)} \\
& \frac{(n_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 (j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j^{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \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=1}^{\sum_{j_s=l_t+\mathbf{n}-D-s+1}^{(l_s)}} \sum_{(j_s=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\begin{array}{c} l_s \\ j_s \end{array}\right)} \\
& \sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\begin{array}{c} l_s \\ j_{ik}+j_{sa}-j_{sa}^{ik} \end{array}\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\left(\begin{array}{c} l_s \\ j_i \end{array}\right)} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\left(\begin{array}{c} l_s \\ n_{is}+j_{sa}-j_i-\mathbb{k}_1 \end{array}\right)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\left(\begin{array}{c} l_s \\ n_{ik}+j_{ik}-\mathbb{k}_1 \end{array}\right)}
\end{aligned}$$

giündu

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k}: z = 3 \wedge z = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(-1)!}{(n_s + l_s - \mathbf{n} - 1)! \cdot (n_s - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{n} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_i)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + l_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\infty} \sum_{j_i=l_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_s - 1)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}}^{\infty} \sum_{(j^{sa} = j_{sa} + j_{sa}^{ik} - l_i)}^{\infty} \sum_{j_i = l_{sa} + \mathbf{n} + s - D - j_{sa}}^{l_{ik} + s - j_{sa}^{ik}}$$

$$\sum_{n+1 \leq n_i \leq (n_{is} = n + \mathbb{k} - j_s + 1)}^{\infty} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - 1)}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{\infty} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{\infty}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\mathbf{n} < \mathbf{l}_s \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j_{ik}, j_{sa}, j_i} &= \sum_{k=1}^{l_s + s - 1} \sum_{(j_s = j_{ik} + k) \wedge (j_{sa} = l_{ik})} \\
&\quad \sum_{i_k = i - 1 + 1}^{j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} + j_{sa}^{ik} - l_i) \leq i_k \leq j_{sa} + l_s - 1} \\
&\quad \sum_{i=n+\mathbb{k}}^n \sum_{(n_i - j_s + 1)}^{n_i - j_s + 1} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
&\quad \sum_{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j_{sa}-j_i-\mathbb{k}_3}^{n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \\
&\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot \\
&\quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j_{sa} - \mathbf{l}_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.
\end{aligned}$$

g i u d i n g

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_i+l_{sa})}^{(\ )} \sum_{j_i=l_s+s}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} n_{ik}=n+\mathbb{k}_2+j_{ik}-\mathbb{k}_1+1$$

$$\sum_{(n_{sa}+\mathbb{k}_3-j_{sa})}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{(n_{is}-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_1)} \dots$$

$$\frac{(n_{is}-n_s-\mathbb{k}_1-1)!}{(j_i-2)! \cdot (j_i-n_{is}-j_s+1)!}.$$

$$\frac{(n_{is}-n_s-\mathbb{k}_1-1)!}{(j_{ik}-j_i-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{sa}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(\right)} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_s+s-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}}^{\left(\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - l_{ik} - l_{sa})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_i) \cdot (j_s - 2)!} \\ \frac{(D - l_i)}{(D + j_i - \mathbf{n} - l_i) \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq l_{ik} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + l_{sa} - s \wedge j^{sa} - j_{sa} - \mathbb{k}_1 \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_s > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + j_i - \mathbf{n} < l_{sa} \wedge D + l_s + j_{sa} - s - 1$$

$$D < \mathbf{n} < n \wedge \mathbb{k} = \mathbb{k} > 0$$

$$j_{sa} - j_{sa}^i - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 < j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_z = s - \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - \mathbb{k}_3 - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=l_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}^{}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(\mathbf{n} - 1)!}{(n_s + \mathbf{n} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{n} - l_i)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left.\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left.\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\begin{aligned}
& f(z^{j_{sa}}, k_1, j^{sa}, j_i) \sum_{(j_s=j_{ik}+l_s-l_{ik})} \sum_{(n_i=j^{sa}+l_i-l_{sa})} \\
& \sum_{j_{ik}=j_{sa}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j^{sa}=l_{sa}+n-D}^{j_{sa}-1} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{i=n+k}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
& \sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.
\end{aligned}$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=1}^{\mathbf{l}_s + j_{sa}^{ik} - 1} \sum_{\substack{(j_s = j_{ik} + l_s - l_{ik}) \\ (j_{ik} + l_{sa} - j^{sa} - l_{ik})}}^{\left( \begin{array}{c} \\ \end{array} \right)}$$

$$\sum_{j_{ik} = j_{sa} + l_i - l_{sa}}^{l_s + j_{sa}^{ik} - 1} \sum_{\substack{(j_{sa} = l_s + j_i - l_{sa}) \\ (j_{ik} = j^{sa} + l_i - l_{sa})}}^{(j_{sa} - s)}$$

$$\sum_{n_i = \mathbf{n} + \mathbf{k}}^{\eta} \sum_{\substack{(n_{ik} = \mathbf{n} + \mathbf{k} - j_s + \mathbf{l}_i - \mathbf{l}_{ik}) \\ (n_{ik} = j^{sa} - \mathbf{k}_2)}}^{(n_i - 1)} \sum_{\substack{(n_{ik} = j^{sa} - \mathbf{k}_2) \\ (n_{sa} = \mathbf{n} + \mathbf{k}_3 - j^{sa} + 1)}}^{(n_{ik} - \mathbf{k}_1 - 1) + \mathbf{l}_i - \mathbf{l}_{ik} - \mathbf{k}_1}$$

$$\sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbf{k}_3} \sum_{\substack{(n_{sa} = \mathbf{n} + \mathbf{k}_3 - j^{sa} + 1) \\ (n_{sa} = \mathbf{n} + \mathbf{k}_3 - j^{sa} + 1)}}^{(n_{sa} - j^{sa} - \mathbf{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbf{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbf{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\begin{aligned}
 & \sum_{k=1}^{\binom{n}{l_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-1)} \sum_{j_i=j^{sa}+l_i-l_{ik}}^{( )} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{( )} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{( )} \\
 & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - l_i - j_{sa})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - l_i)! \cdot (n + l_{sa} + j_{sa} - l_{sa} - j^{sa} - j_{sa})!} \cdot \\
 & \frac{(l_s - 2)!}{(\mathbb{k}_1 - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} \\
 D \geq n < n \wedge l_s > 1 \wedge l_s = n - n + 1 \wedge \\
 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{sa} - j_{sa} \leq j_i \leq n \wedge \\
 l_{ik} - j_{sa}^{ik} + 1 = s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
 D + n - n < l_{sa} \leq n + l_s + j_{sa} - n - 1 \wedge \\
 \geq n \leq n \wedge I = \mathbb{k} > 0 \wedge \\
 j_{sa} = j_{sa}^{i_1} - 1 \wedge j_{sa}^{i_2} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\
 s: \{j_{sa}^s, \dots, j_{sa}^{i_1}, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge \\
 > 6 \wedge s = s + \mathbb{k} \wedge \\
 \mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow
 \end{aligned}$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{n}{l_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=1}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)}$$

$$\sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} \bullet 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+1} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{j_{sa}-D-j_{sa}-1} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}^{(n+j_{sa}-s)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_s - 1)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{\substack{j_{ik}=l_{sa}+j_{sa}^{ik}-D-j_{sa} \\ j_{ik} \in \mathbb{N}}}^{\mathbf{l}_s+j_{sa}^{ik}-1} \sum_{\substack{(n+\mathbf{k})-s \\ n+\mathbf{k} \in \mathbb{N}}}^{\mathbf{n}+j_{sa}-s} \sum_{\substack{j_i=j^{sa}+l_i-l_{sa} \\ j_i \in \mathbb{N}}}^{\mathbf{n}_is+j_s-j_{ik}-\mathbf{k}_1}$$

$$\sum_{\substack{(n_i-j_s) \\ n_i \in \mathbb{N}}}^{\mathbf{n}_i-\mathbf{k}} \sum_{\substack{n_{ik}=\mathbf{n}+\mathbf{k}_2+\mathbf{k}_3-j_{ik}+1 \\ n_{ik} \in \mathbb{N}}}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbf{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbf{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbf{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbf{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\begin{aligned}
& \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \\
& \sum_{l_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{sa}+j_{sa}-j_{sa})}^{\left(\begin{array}{c} \\ \end{array}\right)} \\
& \sum_{n_i=n+\mathbb{k}_1(n_{ik}+\mathbb{k}_2+n_{sa}+\mathbb{k}_3)+\mathbb{k}_1}^n \sum_{(n_{ik}=n_{ik}+j_{ik}-\mathbb{k}_1)}^{\left(\begin{array}{c} n_i-j_s+1 \\ \end{array}\right)} \\
& \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{\left(\begin{array}{c} \\ \end{array}\right)} \\
& - j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})! \\
& \mathbb{k}_1 \cdots - \mathbb{k}_3 \cdot ((n + j_{sa} + j^{sa} - s - j_{sa}^{ik})!) .
\end{aligned}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq -r - 1 \wedge$$

$$1 \leq j_s < j_{ik} - j_{sa} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - s \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} \wedge l_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - 1 \leq l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n+j_{sa}-s)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_{ik}-\mathbb{k}_1}^{n_{is}+j_{ik}-\mathbb{k}_1} j_{ik}+1$$

$$\sum_{n_{ik}+j_{ik}-\mathbb{k}_2}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{n_{sa}+j_{sa}-\mathbb{k}_3}^{n_{sa}+j_{sa}-\mathbb{k}_3} n_{is}+j_{ik}-\mathbb{k}_1$$

$$\frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 + 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - l_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\mathbf{(n+j_{sa}-s)}} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j^{sa}-j_i-\mathbf{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{n_{ik}+j^{sa}-\mathbb{k}_2} \sum_{n_{si}=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbf{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (j_s-n_{is}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j^{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}^{} \\
& \sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\mathbf{( )}} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

giündu

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k} \cdot z = 3 \wedge z = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{sa}+\mathbf{n}-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n+j_{sa}-s)} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(-1)!}{(n_s + \mathbf{n} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{n} - l_i)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s = l_{sa} + \mathbf{n} - D - j_{sa} + 1)}^{(l_s)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s}^{n} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(n + j_{sa} - s)} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{(n + j_{sa} - s)}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{sa} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(\mathbf{l}_s - 1)} \sum_{l_{sa}=j_s+l_{ik}-l_s}^{\mathbf{l}_s} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_s)}$$

$$\sum_{l_{ik}=j_s+l_{ik}-l_s}^{n_{sa}+l_{ik}-l_s} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_s)} \sum_{j_{sa}=n_{sa}+j^{sa}-j_i}^{(l_s)}$$

$$\sum_{k=1}^{(n_i - j_i + 1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{sa}-\mathbb{k}_1}^{(n_i - j_i + 1)} \sum_{n_{ik}=n_{is}+j_{ik}-\mathbb{k}_1}^{(n_i - j_i + 1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(n_{sa})}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - j_i - \mathbf{n} - l_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$> n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge l_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned} {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{s=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \\ &\quad \sum_{j^{sa}+j_{sa}^{ik}-s}^{\left(j_i+j_{sa}-s\right)} \sum_{(j^{sa}=j_{sa}+1)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i=s+1}^{\left(\begin{array}{c} \\ \end{array}\right)} \\ &\quad \sum_{n_i=n+\mathbb{k}}^{\infty} \sum_{(n_{ik}+1)}^{\left(n_i-n_{ik}-1\right)} \sum_{n_k=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\left(n_{ik}-j_{ik}-\mathbb{k}_1\right)} \\ &\quad \sum_{(n_{sa}=j_{sa}+s_3-j^{sa}+1)}^{\left(n_{sa}-j_{sa}-\mathbb{k}_2\right)} \sum_{n_s=n-j_i+1}^{\left(n_{sa}+j^{sa}-j_i-\mathbb{k}_3\right)} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - j_i - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ &\quad \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot \\ &\quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ &\quad \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \end{aligned}$$

guidi

YAF

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{sa})} \sum_{j_i=l_{ik}+j_{sa}^{ik}-s+1}^{l_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+j_{ik}-s+1}^{n_{is}+j_s-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}+1)} \sum_{(n_{sa}+j^{sa}-j_i-j_{ik}+1)}^{(n_{sa}+j_{ik}-n_{sa}-\mathbb{k}_2-1)}$$

$$\frac{(n_{is}-n_s-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_i-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(\right)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-\mathbb{k}_1-j_{ik}-\mathbb{k}_1}^{\left(\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_2-j_{sa})}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2 - \mathbb{k}_2 - j_{sa})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_2)! \cdot (\mathbf{n} + j_{sa} - j^{sa} - \mathbb{k}_2 - j_{sa})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq s + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j_{ik} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k}_1 \wedge 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$\therefore z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

$$\sum_{j_{ik}=j_{sa}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{ik}-n_{is}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}.$$

$$\frac{(n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=1}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{sa})} \sum_{j_i=l_s+s}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{\mathbf{D}}{\mathbf{n}}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\binom{\mathbf{D}}{\mathbf{n}}} \sum_{j_i=s+1}^{\mathbf{l}_s+s-1}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{\mathbf{D}}{\mathbf{n}}} \sum_{j_i=s+1}^{\mathbf{l}_s+s-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s < n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{(j_s=j_{ik}+l_s-l_{ik})} \sum_{(j_{sa}=j_{sa}+1)}^{(j_{sa}=j_{sa}-1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{ik}+j_{sa}^{ik}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 1)!}{(l_s - j_s) \cdot (\mathbf{n} - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j_{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\dots \frac{(l_i + j_i - l_{sa} - s)!}{(j^{sa} + l_i - l_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{\left(\right)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik}} \sum_{(j^{sa} = l_{ik} + j_{sa}^{ik} - s + 1)}^{(l_{sa})} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{sa} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_i - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(\mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{j_{ik}=j}^n \sum_{j_{sa}=(j^{sa}-1)}^{l_{ik}+j_{sa}^{ik}} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_{ik}+j_{sa}^{ik}-s} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{l_{ik}+j_{sa}^{ik}}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{j_{sa}=(j^{sa}-\mathbb{k})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_i-j_s+1} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{n_{sa}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^n \sum_{(j_s=j_{ik})} \sum_{(j_{sa}=j_{ik})} \sum_{(j_i=j_{ik})}$$

$$j_{sa}^{ik} + j_{sa}^i - j_{sa} \quad (\mathbf{l}_s + j_{sa} - s) \quad l_i$$

$$\sum_{\substack{j_{ik}=j_{sa} \\ (j_{sa}=j_{ik})}} \sum_{\substack{(j_{sa}-j_{ik}) \\ (j_{sa}-j_{ik})}} \sum_{\substack{(n_i-j_s+1) \\ (n_i-k_1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2) \\ (n_{sa}=n+\mathbb{k}_3-j_{sa}+1)}} \sum_{\substack{n_{sa}+j_{sa}-j_i-\mathbb{k}_3 \\ n_s=n-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j_{sa} - \mathbf{l}_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{\substack{( ) \\ j_s = j_{ik} + l_s - l_{ik}}}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + 1}^{l_s + j_{sa}^{ik} - 1} \sum_{\substack{(l_{sa}) \\ (j_{sa} = l_s + j_{sa} - j^{sa} - l_{sa})}}^{(l_{sa})} \sum_{\substack{(l_i) \\ (j_i = l_i + j_i - l_i)}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{\substack{(n_i - j_s + 1) \\ (n_{is} = n + \mathbb{k} - j_s + 1)}}^{(n_i - j_s + 1)} \sum_{\substack{(n_{is} + j_s - j_{ik} - 1) \\ (n_{ik} = n + \mathbb{k} - j_{ik} + 1)}}^{(n_{is} + j_s - j_{ik} - 1)}$$

$$\sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{ik} = n + \mathbb{k}_3 - j_{ik} - 1)}}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{\substack{(j_i - \mathbb{k}_3) \\ (j_i = n - j_i + 1)}}^{(j_i - \mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - \mathbb{k}_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - \mathbb{k}_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - \mathbb{k}_s - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_{is} - l_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_i - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n - j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = 1 \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} - 0 \wedge$$

$$j_{sa} = j_{sa}^{i_1} - 1 \wedge j_{sa}^{ik} < j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^{i_2}, \dots, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}+1)!} \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (j_s+n_{is}-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j^{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{( )}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 1)!}{(\ell_s - 1)! \cdot (s - 2)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} \wedge \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - i > l_{ik} \wedge \ell_s \wedge j_{sa} - s > \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^l\}$$

$$s \geq 6 \wedge s = \mathbb{k}_1 + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ell_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$(l_s - 1)!$$

$$+ j_i - j^{sa} - 1)! \cdot (\mathbf{n} - j_i)!.$$

$$(l_s - 2)!$$

$$- j_s)! \cdot (j_s - 2)!.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(i_l + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_i-j_s-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathfrak{l}_s - 2)!}{(\mathfrak{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - l_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots + \mathbb{k}_s \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} + j_{sa} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{\left(\right)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\left(\right)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\left(\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s) \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& C_{i_{ik}, j_{sa}, j_{sa}^{ik}} = \sum_{i=1}^{l_s} \sum_{(j_s=2)}^{l_s} \\
& \sum_{i_{ik}=j_s+l_{ik}-l_s}^{i_{ik}} \left( \sum_{(j_{sa}=i_{ik}+j_{sa}-j_{sa}^{ik})}^{j_{sa}} \sum_{j_i=j^{sa}+s-j_{sa}}^{i_i} \right) \\
& \sum_{\substack{(n_i-j_s-1) \\ (n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}}^{n_{is}} \sum_{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ (n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}}^{n_{ik}} \\
& \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{n_{sa}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ (n_s=\mathbf{n}-j_i+1)}}^{n_s} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(\mathbf{j}_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l}^{(l_s)} \sum_{k=j_{sa}}^{(j_s=2)} j_i=j^{sa}+s-j_{sa}$$

$$n_i = n + \mathbb{k}_i - j_{ik} \quad n_s = n + \mathbb{k}_s - j_{sa} \quad n_k = n + \mathbb{k}_k - j_{ik} - \mathbb{k}_1$$

$$n_i = n + \mathbb{k}_i - j_{ik} - (\mathbb{k}_1 + \mathbb{k}_2) \quad n_s = n + \mathbb{k}_s - j_{sa} - (\mathbb{k}_1 + \mathbb{k}_2)$$

$$\sum_{j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^k} \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^k)!$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$l_s \geq n < \dots \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_{ik} \leq j_{ik} + j_{sa}^{ik} \quad j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - \cancel{j_{ik}} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\binom{r}{s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
&\quad \sum_{j_{ik}=j_{sa}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(j_i+j_{sa}-s)} \sum_{l_{ik}+s-j_s}^{l_{ik}+s-j_{sa}} \\
&\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}-1)}^{(n_{is}+j_{sa}-j_i-\mathbb{k}_1)} \\
&\quad \sum_{(n_{sa}=n+\mathbb{k}_2-j^{sa}+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i+1}^{(n_{is}-j^{sa}+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{is} - n_i - \mathbb{k}_1 - 1)!}{(n_i - n_{is} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
&\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
&\quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\quad \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
&\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{l}{s}} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_{sa}=l_{sa}+\mathbf{n}-D)}^{\binom{l_{sa}}{s}} \sum_{j_i=l_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{\binom{n_i-j_s+1}{s}} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \frac{(n_{ik}+j_{ik}-j_{sa}^{sa})!}{(n_{sa}+j_{sa}-j_i-\mathbb{k}_3)!} \cdot \frac{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j_{sa}+1) \quad n_s=n-j_i+\mathbb{k}_1}{(n_s-n_{ik}-\mathbb{k}_1-1)!} \\
& \frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}-n_{ik}-j_s+1)!} \cdot \\
& \frac{(n_s-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{l}{s}}
\end{aligned}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}^{\infty} \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3) - j_{sa}!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - l_{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - \mathbf{n})}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_i + j_{sa} - s \wedge j^{sa} + j_i - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_i - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - s > l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D + s - \mathbf{n} < l_i \leq D - \mathbf{n} + l_s + s - \mathbf{n} - 1 \wedge$$

$$D < \mathbf{n} < n \wedge \mathbb{k}_1 + \mathbb{k} > 0$$

$$j_{sa} - j_{sa}^i - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \wedge j_i < j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s \wedge$$

$$\mathbb{k}_z, z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - n_s + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\left(\right.\left.\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\left.\right.\left.\right)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(\mathbf{l}_{sa})} \sum_{j_i=l_s+s}^{\mathbf{n}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

$$(l_s - l)^!$$

$$- j_s - 1)! \cdot (\mathbf{n} - j_i)!.$$

$$(l_s - l)^!$$

$$- j_s - 1)! \cdot (j_s - 2)!.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j^{sa} + l_{sa} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(i_l + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - l_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{(\ )}{( )}} \sum_{j_i=l_i+n-D}^{l_s+s-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_i-j_s-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{n_s+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{\mathbf{n}}{\mathbf{l}_s}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\binom{\mathbf{n}}{\mathbf{l}_s}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(l_i+\mathbf{n}+j_{sa}-D-s-1)} \sum_{j_i=l_i+\mathbf{n}-D}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 1)!}{(l_s - j_s) \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - \mathbb{k}_2)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j_{sa} + j_{ik} - j_{ik} - j_{sa})!}.$$

$$\dots \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - \mathbf{n} - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\lfloor \frac{D}{\mathbf{n}} \rfloor} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{\lfloor \frac{D}{\mathbf{n}} \rfloor}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa}} \sum_{(j^{sa} = l_i + \mathbf{n} + j_{sa} - D - s)}^{(l_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - s)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{sa} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - j_{sa})!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_i - j_{sa})!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l}_i)!}{(\mathbf{l}_s - n - \mathbf{k}_1) \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{s=1}^{\mathbf{n}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{i=1}^{l_{ik}} \sum_{(i_{ik} = j_{sa}^{ik} + l_{ik} - j_{sa} + 1)}$$

$$\sum_{n+\mathbf{k}}^{n+\mathbf{k}} \sum_{(n_{is} = n+\mathbf{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbf{k}_2+\mathbf{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbf{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbf{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbf{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbf{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{i=1}^n \sum_{\substack{j_s = j_{ik} + l_s - j_{sa} \\ (j^{sa} = l_i + j_{sa} - j_{ik} - D - s)}} \sum_{\substack{j_i = j_s + s - j_{sa} \\ (j^{sa} = l_i + j_{sa} - j_{ik} - D - s)}}$$

$$\sum_{i=1}^n \sum_{\substack{n+1 \\ (n_{is} = n+1 - j_s + 1)}} \sum_{\substack{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1 \\ (n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}} \sum_{\substack{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3 \\ (n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3)}}$$

$$\frac{(n_i + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(\mathbf{n}_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D > \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{l_{ik}} \sum_{(j_s, j_{ik}, l_s - l_{ik})}^{\binom{n}{s}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}+j_{ik}-n-D) \leq j_i = l_i + n-D}^{(j^{sa}+j_{ik}-n-D-s-1)}$$

$$\sum_{n_i=n}^{n_{is}} \sum_{(n_{is}=n+j_{ik}-i+1)}^{(i_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-i}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{is}+\mathbb{k}_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

gündemi

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(\mathbf{l}_s+j_{sa}-1)} \sum_{j_{l_s}^{sa+s-j_{sa}}}^n$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-1}^{n_{is}+j_s-\mathbb{k}_1}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_3-j_{is}+1) \cdots (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1-j_i+1)}{(n_{sa}-\mathbb{k}_3-j_{is}+1) \cdots (n_{sa}-\mathbb{k}_1-j_i+1)} \cdot \frac{(n_{is}-n_i-\mathbb{k}_1-1)!}{(j_i-2)! \cdot (j_i-n_{is}-j_s+1)!}.$$

$$\frac{(n_{is}-n_i-\mathbb{k}_1-1)!}{(j_{ik}-j_i-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\begin{aligned}
& \sum_{k=1}^{\binom{n}{l_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=l_s+j_{sa})}^{(l_{sa})} \sum_{j_i=j_{sa+s-i}^{sa}}^n \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \frac{(n_{ik}+j_{ik}-j^{sa}-j_{sa}-j_i-\mathbb{k}_3)!}{(n_{sa}=n+\mathbb{k}_3-j_{sa}-1) \cdot n_s=n-j_i+\mathbb{k}_1} \\
& \frac{(n_i-n_{is}-1)!}{(j_{is}-2)! \cdot (n_{is}-n_{sa}-j_s+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1) \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa}-n_s-1)!}{(j_{sa}-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1) \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{\binom{n}{l_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}
\end{aligned}$$

gündem

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{ik} \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - s - 1 > l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D + s - \mathbf{n} < l_i \leq s + l_s + s - \mathbf{n} - 1 \wedge$$

$$D < \mathbf{n} < n \wedge s - \mathbb{k} > 0 \wedge$$

$$j_{sa} - j_{sa}^{i} - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 < j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_z = s - \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_s)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa})} \sum_{j_i=l_i+n-D}^n$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - k_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - l_s - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - l_s - j^{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - l_s - 1)!}{(j_{ls} - j^{sa} - 1)! \cdot (n_{sa} + j_{ls} - j_{ls} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - n_s + 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_s)}^{\left.\right)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^n$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

$$(l_s - 2)!$$

$$- j_s)! \cdot (j_s - 2)!.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(i_l + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\binom{(\ )}{( )}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_i + n + j_{sa}^{ik} - D - s - 1} \sum_{(j^{sa} = l_{sa} + \mathbf{n} - D)}^{(l_{sa})} \sum_{j_i = l_i + \mathbf{n} - D}^n$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 1)!}{(l_s - j_s) \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!}.$$

$$\dots \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+n-j_i-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{sa} - s - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_i - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(\mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{s=1}^{\min(j_i, \mathbf{l}_s)} \sum_{(j_s = j_{ik} + \mathbf{l}_s - \mathbf{l}_{ik})}$$

$$\sum_{\substack{j_{ik}=n+j_{sa}-j_{sa}^{ik}-1 \\ j_{ik} \leq n+j_{sa}^{ik}}}^{\min(n, j_{sa}^{ik}-1)} \sum_{\substack{( ) \\ j_{ik}+j_{sa}-j_{sa}^{ik} \leq j_i+j_{sa}-j_{sa}^{ik}}}^{\min(n-i, n-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}} &= \sum_{n_i=1}^{\sum_{j_{ik}=l_i+k_1}^{(n_i-1)+1}} \sum_{n_{ik}=n+\mathbb{k}_1-k_1}^{(n_i-1)+1} \sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_s+j_s-j_{ik}-\mathbb{k}_2} \\
&\quad \sum_{j_{ik}=l_i+k_1-l_s}^{l_i+k_1} \sum_{j_{sa}=n-D}^{l_s+n-D} \sum_{j_i=l_i+n-D}^{n} \sum_{n_s=n-j_i+1}^{n_j} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
&\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.
\end{aligned}$$

gündin

A

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{\substack{k_1 = l_i + n - s + 1 \\ i_s = l_i + n - s + 1}}^{\mathbf{l}_{sa} - j_{sa}^{ik} + 1} \sum_{j_{ik} = j_s + l_{ik} - 1}^{\mathbf{l}_i - j_{sa}^{ik} + 1} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbf{k}}^{\mathbf{n}} \sum_{\substack{(n_{ik} - j_{sa} - \mathbf{k}_1) \\ (n_{ik} - j_{sa}^{ik} - \mathbf{k}_2) \\ (n_{sa} - j_{sa} - \mathbf{k}_3)}}^{\mathbf{n} + \mathbf{k} - j_{ik} + 1} \sum_{n_k = \mathbf{n} + \mathbf{k}_2 + \mathbf{k}_3 - j_{ik} + 1}^{j_{sa} + j^{sa} - j_i - \mathbf{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(j_s - j_i - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbf{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbf{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j^{sa}+s-j_{sa})} \\ \sum_{n_i=\mathbf{n}+\mathbb{k}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-s+1)} \sum_{n_{ik}=n_{is}+j_s-\mathbb{k}_1} \\ \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j_{sa}-\mathbb{k}_2)} \sum_{(j_i-j_i-\mathbb{k}_3)} \\ \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} - l_{ik} + j_{sa} - j^{sa} - s - j_{sa})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > \mathbf{n} \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} \wedge j_{sa}^{ik} + 1 \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - \mathbf{n} < j_i < D + j_s + s - \mathbf{n} - 1 \wedge$$

$$D < \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\begin{aligned} & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{\infty} \sum_{(j^{sa}=l_{sa}+n-D)}^{\infty} \sum_{j_i=l_i+n-D}^{\infty} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{sa}=n+\mathbb{k}_3-j_i+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{n_s=n-j_i}^{n_{sa}+j_i-j_{ik}-\mathbb{k}_3} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{ik} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{\sum_{(l_{sa})}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\sum_{n}} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{sa}+j^{sa}-j_i-1}$$

$$\frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j^{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{\sum_{(l_s)}} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{\sum_{( )}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\sum_{( )}} \sum_{j_i=j^{sa}+s-j_{sa}}^{\sum_{( )}}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s \\
 & \quad \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot \\
 & \quad \frac{(l_s - 1)!}{(l_s - 1) \cdot (l_s - 2)!} \cdot \\
 & \quad \frac{(D - l_i)!}{(D + j_i - l_i) \cdot (n - j_i)!} \\
 & D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge \\
 & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa} \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} - n \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} + j_{sa} - s = l_i \wedge \\
 & D \geq n < n \wedge I = \mathbb{k} > 0 \wedge \\
 & j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \\
 & s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^l\} \\
 & s \geq 6 \wedge s = \mathbb{k}_1 + \mathbb{k}_2 \wedge \\
 & \mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \\
 & f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} \\
 & \quad \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=s+1}^{l_s+s-1} \\
 & \quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
 \end{aligned}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

$$(l_s - 1)!$$

$$+ j_i - l_i - 1)! \cdot (\mathbf{n} - j_i)!.$$

$$\frac{(l_s - 2)!}{(j_s - 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik} + 1)!}{(j_s + l_i - l_{ik} - l_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\left(\right)} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_s+s}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - l_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\infty} \sum_{j_i=s+1}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\infty}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\sum_{j_{ik} = j^{sa} + l_{ik} - 1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(i_s=2)}$$

$$\sum_{j_{sa} = j^{sa} + l_{sa} - 1}^{(j_{sa}-1)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{\substack{(n_i - j_s) \\ n+\mathbb{k} (n_{is}=n+\mathbb{k}-j_s+1)}} \sum_{\substack{n_{is} + j_s - j_{ik} - \mathbb{k}_1 \\ n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}}$$

$$\sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}} \sum_{\substack{n_{sa} + j^{sa} - j_i - \mathbb{k}_3 \\ n_s=n-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(\mathbf{l}_s)} \sum_{j_s=2}^{(\mathbf{l}_s)} \frac{\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(\mathbf{l}_{sa})} \sum_{(j^{sa}=l_s+j_{sa}^{ik}-j_{ik}+1)}^{(\mathbf{l}_{sa})} \sum_{n_{ik}=n_{is}+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-1} \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_s=n-\mathbb{k}_3-j_{ik}+1} \frac{(n_i - n_{is} - 1)!}{(j_s - j_{is} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_{is} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\left)}$$

$$\begin{aligned} & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\left(l_s+j_{sa}-1\right)} \sum_{(j^{sa}=j_{sa}+1)}^{\left(n_i-j_s+1\right)} \sum_{j_i=j^{sa}+l_i-l_s}^{\left(n_i-k_1\right)} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\left(n_i-j_s+1\right)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{\left(n_s=n_{sa}+j^{sa}-j_i\right)} \\ & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-1)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\right)} \\ & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2 - \mathbb{k}_1 - j_{sa})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - j_i - j_{sa})!} \cdot \\ & \frac{(l_s - 2)!}{(\mathbf{n} - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq \mathbf{n} + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq \mathbf{n} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_{ik} \leq j_i + j_{sa} - s \wedge j_{ik} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > \mathbf{n} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^s, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$z \cdot z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(j_{ik}-j_{sa}^{ik}+1\right)} \sum_{(j_s=2)}$$

**gündemi**

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
 & \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
 & \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
 \end{aligned}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

~~Y~~

~~A~~

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

**GÜNDÜZUN YAYA**

$$\sum_{j_s=2}^{(\mathbf{l}_s)} \sum_{j_{ik}, j^{sa}, j_i} \sum_{\substack{j_k=j_s+j_{sa}^{ik}-1 \\ (j^{sa}=j_{ik}+l_{sa}-l_{ik})}}^{\mathbf{l}_{ik}} \sum_{\substack{j_i=j^{sa}+l_i-l_{sa} \\ (n_i=n+\mathbb{k})}}^{\left(\right)} \sum_{\substack{n_{is}=n+\mathbb{k}-j_s+1 \\ n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}}^{\left(n_i-j_s+1\right)} \sum_{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}^{\left(n_{is}+j_{sa}-j_i-\mathbb{k}_3\right)} \sum_{\substack{n_{sa}=n+\mathbb{k}_3-j^{sa}+1 \\ n_s=n-j_i+1}}^{\left(n_{sa}+j^{sa}-j_i-\mathbb{k}_3\right)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(\mathbf{l}_s - 1)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{i_k=j_s+j_{sa}^{ik}-1}^{\mathbf{l}_s} \sum_{j_s=j_{ik}+l_{sa}-\mathbf{l}_{ik}}^{l_s} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}^{l_s}$$

$$\sum_{i_k=n+\mathbb{k}}^{n_i-(\mathbf{l}_i-1)} \sum_{j_s=n_{ik}+j_s-j_{sa}^{ik}-1}^{n_i-\mathbf{l}_i+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_i}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{n_i}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{l}_i + \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$> \mathbf{n} < \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=1}^{l_i} \sum_{i=2}^{(l_k - j_{sa}^{ik} + 1)} \\
& \sum_{j_{ik}=j_{sa}^i}^{n_i} \sum_{(j^{sa}=j_i+l_{i+1}-l_i)}^{(n_i-l_i+1)} \sum_{j_i=l_i+n-D}^{1} \\
& \sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{ik}=n+\mathbb{k}-j_s+j_{ik})}^{(n_i-k_1+1)} \sum_{n_{sa}=n-k_1-j_i}^{n-k_1} \\
& \sum_{(n_{ik}=n-k_2-j_{sa}+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
\end{aligned}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\begin{aligned} & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right. \left.\right)} \sum_{j_i=l_s+s}^n \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+j_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{sa}=n+\mathbb{k}_3-j_i+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{n_s=n-j_i}^{n_{sa}+j_i-j_{ik}-\mathbb{k}_3} \\ & \frac{(n_i - n_s - 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \end{aligned}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right. \left.\right)} \sum_{j_i=l_i+n-D}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 1)!}{(l_s - 1) \cdot (l_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i)!}.$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} - j_{sa} - s = 0 \wedge$$

$$D + s - n < l_i \leq D + l_s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^{i-1} - j_{sa}^{i-1} + 1 \wedge$$

$$s \in \{j_{sa}^i, \dots, \mathbb{k}_1 - j_{sa}^{ik}, \dots, \mathbb{k}_2 - j_{sa}^{ik}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} j_i=j^{sa}+l_i-l_{sa}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

$$(l_s - 2)!$$

$$- j_s + 1)! \cdot (\mathbf{n} - j_i)!.$$

$$(l_s - 2)!$$

$$- j_s)! \cdot (j_s - 2)!.$$

$$\frac{(l_{ik} - l_{sa} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_{sa})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(\mathbf{n}+j_{sa}-s)} \sum_{(j^{sa}=l_s+j_{sa})}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - n + j_{sa} - j_{sa} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\lfloor \frac{D}{l_s} \rfloor} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\lfloor \frac{D}{l_s} \rfloor}$$

$$\sum_{j_{ik}=j^{sa}+l_i-l_{sa}}^{\lfloor \frac{D}{l_s} \rfloor} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{\lfloor \frac{D}{l_s} \rfloor} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\lfloor \frac{D}{l_s} \rfloor}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{\lfloor \frac{D}{l_s} \rfloor} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\lfloor \frac{D}{l_s} \rfloor}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\lfloor \frac{D}{l_s} \rfloor} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\lfloor \frac{D}{l_s} \rfloor}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& f_z S_{j_s, j_{sa}, j_i} = \sum_{k=1}^{i_{ik} - j_{sa}^{ik} + 1} \\
& \sum_{\substack{l_s + j_{sa}^{ik} - 1 \\ = l_i + n_i + \mathbb{k} - D - s}} \sum_{\substack{( ) \\ j_{sa} + j_{ik} + l_{sa} - l_{ik}}} \sum_{\substack{j_i = j^{sa} + l_i - l_{sa} \\ n_{is} = n + \mathbb{k} - j_s + 1}} \\
& \sum_{\substack{n \\ n_{is} + j_s - j_{ik} - \mathbb{k}_1 \\ n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}} \\
& \sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}} \sum_{\substack{n_{sa} + j^{sa} - j_i - \mathbb{k}_3 \\ n_s = n - j_i + 1}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} .
\end{aligned}$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=1}^{(\mathbf{l}_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}}^{n+j_{sa}^{ik}-s} \sum_{j_{sa}=j_{ik}+l_{sa}-1}^{(n_l-k_1)+1} \sum_{i_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^{n_l} \sum_{(n_{ik}-n+\mathbb{k}-j_s+\mathbb{k}_1)-1}^{(n_l-k_1)+1} \sum_{n_k=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}$$

$$\sum_{(n_{ik}-n+\mathbb{k}_2-j^{sa}-\mathbb{k}_2)-1}^{(n_{ik}-n+\mathbb{k}_2-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+l_i-1}^{\left(\right)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-\mathbb{k}_1}^{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j_i - s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + \mathbf{n} - \mathbf{n} < l_i \leq D - l_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_i - 1 \wedge j_{sa} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i+\mathbf{n}-D-s)} \sum_{(j_s=2)}$$

$$\begin{aligned}
& \sum_{j_{ik}=\mathbf{l}_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{\mathbf{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbf{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbf{k}-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbf{k}_2+\mathbf{k}_3-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbf{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbf{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbf{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-\mathbf{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-\mathbf{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbf{k}_2)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
& \frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=1}^{\mathbf{l}_s} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)}^{(l_s)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\mathbf{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbf{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbf{k}-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbf{k}_2+\mathbf{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1}
\end{aligned}$$

**gündü**

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - l_s)!}{(j_s - j^{sa} - 1)! \cdot (n - j_i)!}.$$

$$(l_s - l_s)!.$$

$$\frac{(l_{ik} - l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - l_{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\infty} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\infty} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\infty}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\infty}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} + 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{n} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_s+s-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_s - 1)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{\substack{j_i = 1 \\ j_{ik} = j^{sa} + l_{ik} - l_{sa}}}^{\mathbf{l}_s} \sum_{\substack{j_{sa} = j_i + l_{sa} - l_i \\ (j_{sa} - j_i) \leq \mathbf{l}_s}}^{(\mathbf{l}_s)} \sum_{\substack{j_i = l_s + s \\ n_{is} = n + \mathbb{k} - j_s + 1}}^n$$

$$\sum_{\substack{j_i = 1 \\ n + \mathbb{k} (n_{is} = n + \mathbb{k} - j_s + 1)}}^{(n_i - j_s)} \sum_{\substack{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1 \\ (n_{ik} - j_{ik}) \leq \mathbf{l}_s}}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{\substack{j_{ik} = 1 \\ n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1}}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{\substack{n_{sa} + j^{sa} - j_i - \mathbb{k}_3 \\ n_s = n - j_i + 1}}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{\substack{( ) \\ (j_s = j_{ik} - j_{sa}^{ik} + 1)}} l_s^{k+1} \sum_{\substack{( ) \\ (j_{ik} = j^{sa} + l_{ik} - l_{sa})}} \sum_{\substack{( ) \\ (j^{sa} = j_i + l_s - l_i)}} j_i - j_s - j_{sa}^{ik} - j_{sa}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{\substack{( ) \\ (n_i - j_s + 1)}} n_{ik} = n_i + j_s - j_{ik} - \mathbb{k}_1$$

$$\sum_{\substack{( ) \\ (n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - \mathbb{k}_2)}} \sum_{\substack{( ) \\ (n_{sa} + j^{sa} - j_i - \mathbb{k}_3)}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^{ik} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - j_{ik} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_i + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq n - \mathbf{n} - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} + j_{sa} - 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - 1 \leq \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\begin{aligned} & \sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{\mathbf{l}_s+j_{sa}-1} \sum_{(j^{sa}=\mathbf{l}_{sa}+n-D)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}^{\mathbf{l}_s+j_{sa}-1} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+\mathbf{j}_{ik}-\mathbf{k}_1}^{n_{is}+\mathbf{j}_{ik}-\mathbf{k}_1} \\ & \sum_{(n_{ik}+j_{ik}-\mathbf{j}_i-\mathbf{k}_2)}^{(n_{ik}+j_{ik}-\mathbf{j}_i-\mathbf{k}_2)} \sum_{n_{sa}+j^{sa}-\mathbf{k}_3}^{n_{sa}+j^{sa}-\mathbf{k}_3} \\ & \frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - \mathbf{j}_{ik} - \mathbf{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!} \cdot \\ & \frac{(n_{ik} - \mathbf{j}_i - \mathbf{k}_2 - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbf{k}_2)!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ & \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\ & \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} + \\ & \sum_{k=1}^{\mathbf{l}_s} \sum_{(j_s=2)} \end{aligned}$$

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=l_s+j_{sa})}^{\infty} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\infty} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{is}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=l_s+n-D)}^{(l_s+j_{sa}-1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\infty} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

**gündün**

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k} \cdot z = 3 \wedge z = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s + j_i - n - l_i)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - j_{sa} - j^{ik} + 1)!}{(j_s + l_{ik} - l_{sa} - l_i - l_{ik})! \cdot (j_{ik} - j_s - j_{sa} - j^{ik} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{} \quad$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{\substack{j_{ik}=l_{sa}+j_{sa}^{ik}-D-j_{sa} \\ j_{ik}=l_{sa}+j_{sa}^{ik}-\mathbf{k}_1}}^{\mathbf{l}_s+j_{sa}^{ik}-1} \sum_{\substack{(j^{sa}-j_{ik}+l_{sa}-l_{ik}) \\ j_{ik}=n_{is}+j_s-j_{ik}-\mathbf{k}_1}}^{\mathbf{n}-(n_i-1)} \sum_{\substack{j_i=j^{sa}+l_i-l_{sa} \\ j_{ik}=n_{ik}+j_{sa}-j_{ik}-\mathbf{k}_1}}^{\mathbf{n}}$$

$$\sum_{\substack{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2) \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_3}}^{\mathbf{n}} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i-\mathbf{k}_3 \\ n_s=n_{sa}+j^{sa}-j_i-\mathbf{k}_3}}^{\mathbf{n}}$$

$$\frac{(\mathbf{n}_i + \mathbf{n}_k + j_{sa} - j^{sa} - s - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3 - j_{sa}^{ik})!}{(\mathbf{n}_i - \mathbf{n}_k - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, l_i} = \sum_{k=1}^{(l_{sa} + \mathbb{k}_3 - D - j_{sa})}$$

$$\sum_{j_{ik}=l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}^{n + j_{sa}^{ik} - s} \sum_{(n_{is} = n + \mathbb{k}_1 + j_{sa}^{ik} - l_{sa})}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ (n_{ik} + j_{sa}^{ik} - j_{sa}^s - \mathbb{k}_2) \sum_{(n_{sa}=n+\mathbb{k}_3-j_{sa}^s+1)}^{n_{sa}+j_{sa}^s-j_i-\mathbb{k}_3} \sum_{n_s=n-j_i+1}^{n_s=j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s = l_{sa} + \mathbf{n} - D - j_{sa} + 1)}^{(l_s)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{n + j_{sa}^{ik} - s} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{} \sum_{j_{ls} = j_{sa} + l_i - l_{sa}}^{n_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s - 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + j_{ik} - j_{sa} + 1}^{n_{is} + j_s - \mathbb{k} - \mathbb{k}_1}$$

$$\sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1 - 1)}^{\sum_{(n_{sa} + \mathbb{k}_3 - j_{sa} - j_{ik} - j_{ls} + 1)}} \sum_{(n_{sa} + j^{sa} - j_i - \mathbb{k}_1 - 1)}^{\sum_{(n_{sa} + \mathbb{k}_3 - j_{sa} - j_{ik} - j_{ls} + 1)}} \\ \frac{(-n_{is} - 1)!}{(i - 2)! \cdot (i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_i - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s = l_{sa} + \mathbf{n} - D - j_{sa} + 1)}^{(l_s)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\infty} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\infty} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\infty} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\
 & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - l_{ik})!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_i) \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)}{(D + j_i - \mathbf{n} - l_i) \cdot (\mathbf{n} - j_i)!}
 \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq l_{ik} \leq j^{sa} + j_{sa}^{ik} - j_i \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + l_{sa} - s \wedge j^{sa} - l_i - j_{sa} - \mathbb{k}_1 \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - 1 = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - \mathbf{n} < l_{ik} \wedge D + l_s + j_{sa}^{ik} - 1 < l_{sa}$$

$$D \geq \mathbf{n} < n \wedge \mathbb{k}_1 - \mathbb{k} > 0$$

$$j_{sa} - j_{sa}^i - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \leq j_i < j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s - \mathbb{k} + \mathbb{k}$$

$$\mathbb{k}_z - \mathbb{Z} = 5 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\infty} \sum_{j_i=l_{ik}+s+n-D-j_{sa}^{ik}}^{l_s+s-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - j_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - j_{sa} - 1)!}{(j_{sa} - j_i - 1)! \cdot (n_{sa} + j_{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(\mathbf{l}_s)} \sum_{(j_s=2)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}} \sum_{(j^{sa}=j_i+\mathbf{l}_{sa}-\mathbf{l}_i)}^{\left(\right)} \sum_{j_i=\mathbf{l}_s+s}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot$$

~~$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$~~

~~$$\frac{(-1)!}{(n_s + \mathbf{n} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$~~

~~$$\frac{(l_s - 2)!}{(l_s - \mathbf{l}_i)! \cdot (j_s - 2)!} \cdot$$~~

~~$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - l_s - l_s) \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$~~

~~$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$~~

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\infty} \sum_{j_i=l_{ik}+s+\mathbf{n}-D-j_{sa}^{ik}}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\infty}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - \mathbf{n} < l_{ik} \leq D + l_s + j_{sa}^{ik} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\sum_{f=1}^{(l_s + j_{sa}^{ik} - 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{\substack{i=n+\mathbb{k} \\ (n_{is}=n+\mathbb{k}-j_s+1)}}^{\sum_{i=n}^{j_{ik}=j^{sa}+l_i-l_{sa}} (j^{sa}-i_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{\substack{i=n \\ (n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}}^{\sum_{i=n}^{(l_s + j_{sa}^{ik} - 1)} (l_s + j_{sa}^{ik} - 1)} \sum_{\substack{i=n \\ (n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}}^{\sum_{i=n}^{(l_s + j_{sa}^{ik} - 1)} (l_s + j_{sa}^{ik} - 1)} \sum_{\substack{i=n \\ (n_s=n-j_i+1)}}^{\sum_{i=n}^{(l_s + j_{sa}^{ik} - 1)} (l_s + j_{sa}^{ik} - 1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{l_s} \sum_{j_s=0}^{l_s-k}$$

$$\sum_{j_{ik}=0}^{n+l_{ik}-l_{sa}} \sum_{a=l_s+j_{sa}}^{n+j_{sa}-s} \sum_{l_i=l_{sa}+1}^{l_s-j_{sa}}$$

$$\sum_{n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-1)+1}^{n-j_s+1} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-1)-j_{sa}-\mathbb{k}_2}^{(n_{ik}+j_{ik}-1)-j_{sa}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$(n_{sa}=n+\mathbb{k}_3-j_{sa}+1) \quad n_s=n-j_i+1$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\begin{aligned} & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\left(l_s+j_{sa}-1\right)} \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{\left(n_i-j_s+1\right)} \sum_{j_l=j^{sa}+l_i-l_{sa}}^{\left(n_i-j_i-\mathbf{k}_1\right)} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-s-1)}^{\left(n_i-j_s+1\right)} \sum_{n_{ik}=n_{is}+j_s-\mathbb{k}_1}^{\left(n_i-j_i-\mathbb{k}_3\right)} \\ & \sum_{(n_{ia}=n_{ik}+j_{sa}-j^{sa}-s-\mathbb{k}_2)}^{\left(n_i-j_i-\mathbb{k}_3\right)} \sum_{(n_{ia}=n_{ik}+j_{sa}-j^{sa}-s-j_{sa}^{ik})}^{\left(n_i-j_i-\mathbb{k}_3\right)} \\ & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} - n_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \end{aligned}$$

$$\begin{aligned} & D \geq \mathbf{n} < n \wedge l_s > \mathbf{n} \wedge l_s \leq D - n \wedge l_s & \wedge \\ & 1 \leq j_s \leq j_{ik} \wedge j_{sa}^{ik} + 1 \leq j^{sa} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + l_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\ & D + j_{sa}^{ik} - \mathbf{n} - l_{sa} < D - l_s \wedge l_s + j_{sa}^{ik} - \mathbf{n} - 1 \wedge \\ & D < \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge \\ & j_{sa} = j_{sa}^i - \mathbb{k} \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\ & \mathbf{s}: \{j_{sa}, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge \end{aligned}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa}-1)!}{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j_s-1)!} \cdot \frac{n_s=n-j_i+1}{(n_s-j_i-1)!} \cdot$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \cdot$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(n_{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - j^{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - j^{sa} - 1)!}{(j_s - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right.\left.\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right.\left.\right)}$$

$$\sum_{j_{ik}=\mathbf{l}_{ik}+\mathbf{n}-D}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-\mathbf{l}_{ik})}^{\left(\right.\left.\right)} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}^{\left(\right.\left.\right)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.\left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left(\right.\left.\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa}^{ik} - \mathbf{n} < \mathbf{l}_{ik} \leq D + \mathbf{l}_s + j_{sa}^{ik} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{} \sum_{}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot$$

~~$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$~~

~~$$\frac{(l_s - 1)!}{(l_s - j_{sa})! \cdot (l_s - 2)!} \cdot$$~~

~~$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - l_s - j_{sa} + 1)!}$$~~

~~$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$~~

$$\sum_{k=1}^{\min(n+1, D+1)} \sum_{\substack{j_s = l_{ik} + n - D - j_{sa}^{ik} + 1 \\ j_{sa} = l_{sa} + n - k - j_{ik} + 1}}^{(l_s)}$$

$$\sum_{j_i=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{\substack{(j^{sa} = j_{ik} + l_{sa} - l_{ik}) \\ j_i = j^{sa} + l_i - l_{sa}}} \sum_{\substack{n_i = n + \mathbb{k} \\ (n_{is} = n + \mathbb{k} - j_s + 1)}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+\mathbb{k}-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=n-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{\substack{k=1 \\ k=l_{ik}+n-D-j_{sa}^{ik}}}^{(l_s)} \sum_{\substack{j_i=j_s+j_{sa}^{ik}-1 \\ j_i=j_s+l_{sa}-l_{ik}}}^{(l_s)}$$

$$\sum_{\substack{j_{ik}=j_s+j_{sa}^{ik}-1 \\ j_{ik}=j_s+l_{ik}-l_{sa}}}^{n} \sum_{\substack{j_i=j_s+j_{sa}^{ik}-1 \\ j_i=j_s+l_{i}-l_{sa}}}^{(l_s)}$$

$$\sum_{\substack{n+\mathbb{k} \\ n_{is}=n+j_{sa}^{ik}-j_s+1}}^n \sum_{\substack{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}}^{(l_s-j_s+1)} \sum_{\substack{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3 \\ n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^{ik} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(\mathbf{n}_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\begin{aligned} & D \leq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge \\ & 1 \leq j_s \leq j_{sa}^{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \end{aligned}$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=1}^{n_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-l_{sa}}^{(j_i+j_{sa})} \sum_{i_{sa}+1, j_{sa}=s+1}^{l_s+s-1} \\
 & \sum_{n_i=n+\mathbb{k}(n-i+1)}^{n} \sum_{n_{ik}=n-\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_i-j_s+1)} \\
 & \sum_{n_{is}=n+\mathbb{k}_3-j_i+1}^{n_{is}+j_s-j_{ik}} \sum_{n_s=n-j_i+1}^{(n_{ik}-n-j^{sa}-\mathbb{k}_2-\mathbb{k}_3)+1-j_i-\mathbb{k}_3} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{sa})} \sum_{(j^{sa}=j_{sa}+1)}^{l_i} \\
& \sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} n_{ik}=n+\mathbb{k}_2-j_3-j_{ik}+1 \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j_i+1)}^{(n_{ik}+j_{ik}-j^{sa})} n_{sa}+j_i-j_{ik}-\mathbb{k}_3 \\
& n_s=n-j_i \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{ik} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_{sa} - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \sum_{k=1}^{\left(\right.} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left.\right)}
\end{aligned}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{lk}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa})!}.$$

$$\frac{\frac{(l_s-2)!}{(l_s-1)!(j_s-2)!}}{\frac{(D-s)!}{(D+j_i-s-n-l_i)!(n-j_i)!}}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} - j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - 1 = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = 1 > 0 \wedge$$

$$j_s = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{ \mathbb{c}, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3 \} \cup \mathcal{J} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_1 = \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - n_s + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(\mathbf{l}_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{(l_{sa})} \sum_{(j^{sa}=\mathbf{l}_s+j_{sa})}^{l_i} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (\mathbf{n} + j^{sa} - n_s - 1)!}.$$

~~Y~~

$$\frac{(l_s - l_s - 1)!}{(j_s - j^{sa} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

~~A~~

$$\frac{(l_s - l_s)!}{(j_s - j^{sa})! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{sa} - j_{ik} - l_{sa})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{l_s+j_{sa}-1} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{l_s + j_{sa}^{ik} - 1} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik} - 1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s) \cdot (j_{ik} - j_s - \mathbf{l}_s + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_{sa} - s) \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(\mathbf{l}_s)} \sum_{(j_s=2)}^{(\mathbf{l}_s)}$$

$$\sum_{i_k=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+l_{ik}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{l}_i - 1)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{\substack{j_{ik} = j_{sa}^{ik} + 1 \\ j^{sa} = n + \mathbb{k}} \atop (n_{is} = n + \mathbb{k} - j_s + 1)} \sum_{\substack{j_{ik} = n_{ik} + j_{sa} - \mathbb{k}_1 \\ n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}} \sum_{\substack{j_i = j^{sa} + s - j_{sa} \\ j_i = n_i - \mathbb{k} + 1}}$$

$$\sum_{\substack{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}} \sum_{\substack{(n_i + \mathbb{k} + \mathbb{k}_1 + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})! \\ (n_i - n_{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}} \cdot$$

$$\sum_{\substack{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}} \sum_{\substack{(n_i + \mathbb{k} + \mathbb{k}_1 + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})! \\ (n_i - n_{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$l_{ik} > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j_{sa}, j_i} &= \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 &\quad \sum_{j_{ik}=j_s+j_{sa}^{ik}}^{l_{ik}} \sum_{j_{sa}=j_{ik}+l_{sa}-j_s}^{l_{sa}} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_i} \\
 &\quad \sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{ik}=n+\mathbb{k}-j_s+1)}^{(n_{ik}+1)} \sum_{(n_{sa}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_{sa}+\mathbb{k}_1-\mathbb{k}_1)} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 &\quad \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}.
 \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{l_s} \sum_{(j_s=2)}^{(l_s)}$$

$$\begin{aligned} & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_{sa}^{sa}+s-j_{sa}}^{(\ )} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-\mathbb{k}_1}^{(\ )} \\ & \sum_{(n_{ca}=n_{ik}+j_{sa}-\mathbb{k}_1-j_{sa}-\mathbb{k}_2-\mathbb{k}_3)}^{(\ )} \sum_{(j_{sa}^{sa}-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^{ik})}^{(\ )} \\ & \frac{(n_i + j_{ik} + j_{sa} - j_{sa}^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} - j_{ik} + j_{sa} - j_{sa}^{sa} - s - j_{sa}^{ik})!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \end{aligned}$$

$$\begin{aligned} & D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} - 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq j_i + j_{sa} - j_{sa}^{sa} \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & l_{ik} - j_{sa}^{sa} + 1 > l_s \wedge l_{sa} - j_{sa}^{ik} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & D + s - \mathbf{n} - 1 \leq D + j_i + s - \mathbf{n} - 1 \wedge \\ & D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge \\ & j_{sa} = j_{sa}^i - \mathbb{k} \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\ & s \cdot \{ j_{sa}, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i \} \wedge \end{aligned}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_t=l_i+n}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa})!}{(n_{sa}=n+\mathbb{k}_3-j_s+1)!} \cdot \frac{(n_{ca}+j^{sa})!}{n_s=n-j_i+j^{sa}} \cdot \frac{j_t-\mathbb{k}_3}{j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=l_{sa}+n-D)}^{\left(l_{sa}\right)} \sum_{j_i=l_s+s}^n \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{sa}+j^{sa}-j_i-1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{\left(\mathbf{l}_i\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\mathbf{l}_i\right)} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\mathbf{l}_i\right)} \sum_{j_i=l_i+n-D}^{l_s+s-1}
\end{aligned}$$

gündün

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 1)!}{(l_s - 1) \cdot (l_s - 2)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - l_i - l_s)! \cdot (\mathbf{n} - j_{sa}^{ik})!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} \wedge j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} - j_{sa} - s > 0 \wedge$$

$$D + s - \mathbf{n} < l_i \leq D + l_s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^{i-1} = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_i+n+j_{sa}-D-s-1)} \sum_{(j^{sa}=l_{sa}+n-D)}^n \sum_{j_i=l_i+n-D}^n$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - l_s - 1)!}{(j_s - j^{sa} - 1)! \cdot (n - j_i)!}.$$

~~( $\mathbf{l}_s - \mathbf{l}_s$ )!~~

$$\frac{(l_s - 2)!}{(j_s - j^{sa} - 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{sa} - l_{ik} - l_{sa})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - l_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-1)} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{n} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot$$

~~$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$~~

~~$$\frac{(-1)!}{(n_s + l_i - \mathbf{n} - 1)! \cdot (n_s - j_i)!} \cdot$$~~

~~$$\frac{(l_s - 2)!}{(l_s - \mathbf{n})! \cdot (j_s - 2)!} \cdot$$~~

~~$$\frac{(l_{ik} - 1 - j_{sa} + 1)!}{(j_s + l_{ik} - l_s - l_{sa})! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$~~

~~$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_i + l_i - l_s - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$~~

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_s+j_{sa})}^{(l_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^n$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - \mathbf{l}_s + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\lfloor \frac{\mathbf{n}}{j_{ik}} \rfloor} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\lfloor \frac{\mathbf{n}}{j_{ik}} \rfloor}$$

$$\sum_{j_{ik}=j^{sa}}^{j^{sa}} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{(\mathbf{l}_s+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(D-\mathbf{l}_i)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\lfloor \frac{\mathbf{n}}{j_{ik}} \rfloor} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\lfloor \frac{\mathbf{n}}{j_{ik}} \rfloor}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^n \sum_{j_{ik}=j_i+n-D}^{l_i+n+j_{sa}^{ik}-D-s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^n \sum_{j_i=l_i+n-D}^n \\ \sum_{n_{ik}=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\ \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s=j_{ik}-j^{sa}-1} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}. \\ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}. \\ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}. \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}. \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{n}$$

$$l_s + j_{sa}^{ik} - 1$$

$$\sum_{n_{ik}=l_i+n+j_{sa}^{ik}-s}^n (j^{sa}=j_{sa}-\mathbf{l}_{sa}-\mathbf{l}_{ik}) \quad j_i=j_{ik}+s-j_{sa}$$

$$(n_{ik} = n + \mathbf{k}_1 + \mathbf{k}_2 + \mathbf{k}_3 - j_{ik} + 1)$$

$$n_{is} + j_s - j_{ik} - \mathbf{k}_1$$

$$(n_{is} = n + \mathbf{k}_1 + \mathbf{k}_2 + \mathbf{k}_3 - j_{ik} - j^{sa} - \mathbf{k}_2) \quad n_{sa} + j^{sa} - j_i - \mathbf{k}_3$$

$$(n_{sa} = n + \mathbf{k}_3 - j^{sa} + 1) \quad n_s = n - j_i + 1$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbf{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbf{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{l_s} \sum_{(j_s=j_{sa}+k)}^{(l_s)} \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa})}^{\left(\right)} \sum_{(j_i=j^{sa}-j_{sa})}^{n} \\ \sum_{n_i=n+\mathbb{k}_3}^n \sum_{(n_{is}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\ \sum_{(n_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}-n+\mathbb{k}_3-j_s-1)} \sum_{n_s=n-j_i+1}^{n_i-j_s-1} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{l_s}{2}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{l_s}{2}}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\binom{n_i-j_s+1}{2}} \sum_{j_i=j^{sa}+s-1}^{n_i-k_1}$$

$$\sum_{n_i=n+k}^{\binom{n_i-j_s+1}{2}} \sum_{(n_{is}=n+k-j_s+1)}^{n_i-k} n_{ik}=n_{is}+j_{ik}-k_1$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{\binom{n_i-j_s+1}{2}} n_{sa}=n_{sa}+j^{sa}-j_i$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s + l_i - k_1 - k_2 - j_{sa}^{ik})!}{(n_i - n - k_1 - k_2)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s + l_i - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq n - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n_a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j_i - s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + n - n < l_i \leq D - l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} = j_i - 1 \wedge j_{sa} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, k_2, j_{sa}, k_3, j_{sa}^i\} \wedge$$

$$6 \wedge s < s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=l_i+\mathbf{n}-D}^{\mathbf{n}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{sa}+j^{sa}-j_i-1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j^{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{\left(l_s\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}}
\end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - \mathbb{k}_3 - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\mathbf{(l}_s)} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=j_{ik}+\mathbf{l}_{sa}-\mathbf{l}_{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{( ) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\ )} \sum_{j_i=s+1}^{l_s+s-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 1)!}{(l_s - j_{ik})! \cdot (l_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - l_s - j_{sa} + 1)!} \cdot$$

$$\frac{(j_{ik} + j_{sa} - l_{ik} - l_s)! \cdot (l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j^{sa} - l_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_{sa}+1}^{l_{ik}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_s+s}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{ik})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa} - j_{sa}} \sum_{(j^{sa} = j_i + \mathbf{l}_{sa} - \mathbf{l}_i)} \sum_{j_i = s+1}^{l_s + s - 1}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_s = n+\mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{l_s + s - 1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{(j_{sa} - j_{sa}^{ik} + 1)}$$

$$\sum_{\substack{i_{ik} = j_{sa}^{ik} + 1 \\ j_{sa} = j_{sa}^{ik}}}^{j^{sa} + j^{ik} - j_{sa}} \sum_{\substack{l_i = l_{sa} \\ l_{sa} = l_{sa}^{ik}}}^{(l_s + j_{sa})}$$

$$\sum_{n=\mathbb{k}}^{n_is} \sum_{\substack{j_i = j_s + 1 \\ n_{ik} = n + \mathbb{k}_1 - 1}}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik} + j_{sa} - j_{sa}^{ik} - \mathbb{k}_2) \\ (n_{sa} = n + \mathbb{k}_3 - j_{sa}^{ik} + 1)}}^{(n_{ik} + j_{sa} - j_{sa}^{ik} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{l_s} \sum_{\substack{j_s=\Sigma \\ (j_s=j_{sa}^{ik}+1) \dots (j_s=n-j_i+1)}}^{\mathbf{l}_s} \frac{\sum_{\substack{j_{ik}=j_{sa}^{ik}+1 \\ (j_{ik}=n-k_1) \dots (j_{ik}=n-l_{ik}-1)}}^{l_{ik}} \sum_{\substack{n_i=n+k \\ (n_i=n-k_1) \dots (n_i=n-l_{ik}-1)}}^{(n_i-j_s+1)} \sum_{\substack{n_{is}=n+k_3-j_{ik}-1 \\ (n_{is}=n-k_2) \dots (n_{is}=n-j_i)}}^{n_{is}+j_s-j_{ik}-1} \sum_{\substack{n_s=n-j_i+1 \\ (n_s=n-k_3-j_{ik}-1) \dots (n_s=n-l_{ik}-1)}}^{(n_s-n+k_3-j_{ik}-1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

g

- ü
- d
- i
- s

$$\begin{aligned}
 & \sum_{k=1}^{\binom{l_s}{l_i}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{l_s}{l_i}} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{l_s+j_{sa}-1}{l_i}} \sum_{(j^{sa}=j_{sa}+1)}^{\binom{n_i-j_s+1}{n_i}} \sum_{j_i=j^{sa}+l_i-l_s}^{\binom{n_i-j_s+1}{n_i}} \\
 & \sum_{n_i=n+\mathbb{k}}^{\binom{n_i-j_s+1}{n_i}} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\binom{n_i-j_s+1}{n_i}} n_{ik}=n_{is}-\mathbb{k}_1-j_{ik}-\mathbb{k}_1 \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_2-j_{sa})}^{\binom{n_i-j_s+1}{n_i}} \sum_{(n_{is}=n_{sa}+j^{sa}-j_i)}^{\binom{n_i-j_s+1}{n_i}} \\
 & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_2 - j_{sa})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_2)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!} \cdot \\
 & \frac{(l_s - 2)!}{(\mathbf{n} - j_s)! \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 > 1 \wedge l_i \leq n + s - \mathbf{n} \wedge \\
 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j_{sa} - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\
 l_{ik} - j_{sa}^{ik} + 1 > 0 \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}_1 > 0 \wedge \\
 j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\
 s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^i, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge \\
 s \geq 6 \wedge s < n + \mathbb{k} \wedge \\
 z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow \\
 f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{j_{ik}-j_{sa}^{ik}+1}{j_s}} \sum_{(j_s=2)}^{\binom{j_{ik}-j_{sa}^{ik}+1}{j_s}}
 \end{aligned}$$

g i u l d u

$$\begin{aligned}
& \sum_{j_{ik}=l_s+j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{sa}-j_{sa}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
& \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}}
\end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - j^{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - n_s + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_{sa})}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-\mathbb{k}_1+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!}.$$

~~$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$~~

~~$$\frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!}.$$~~

~~$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!}.$$~~

~~$$\frac{(j_{ik} + j_{sa} - l_{ik} - l_{sa})! \cdot (l_{ik} - j_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!}.$$~~

~~$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$~~

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{( )}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - \mathbf{n} < l_i \leq D + l_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_{2, \dots, l_i, j_{ik}, j^{sa}, j_s} = \sum_{i=1}^{l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_s+s-1}$$

$$\sum_{i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{sa} - j_{sa})!}.$$

$$\frac{(D - n - l_i)! \cdot (n - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{(j_s=2)}^{\sum_{(j_s=2)}^{(l_s)}} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{\substack{j_{ik}=l_{ik}+1 \\ n+\mathbb{k}(n_{is}=n+\mathbb{k}-j_s+1)}}^{l_{ik}} \sum_{\substack{(j^{sa}=j_i+l_{sa}-l_i) \\ n_{ik}=n+\mathbb{k}_2+j_{ik}-1}}^{( )} \sum_{j_i=l_s+s}^n$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{j_{ik}=j^{sa}+1 \\ j_{sa}=j_i+\mathbf{l}_s-\mathbf{l}_{ik}-1}}^{\infty} \sum_{\substack{j_l=l_i+n-D \\ j_l=j_{ik}+j_{sa}-1}}^{\infty} \sum_{\substack{n_i=n+\mathbb{k}_1 \\ n_i=n+\mathbb{k}_1-j_s+1}}^{\infty} \sum_{\substack{n_{ik}=n_{sa}+j^{sa}-j_{ik}-\mathbb{k}_1 \\ n_{ik}=n_{sa}+j^{sa}-j_{ik}-\mathbb{k}_2}}^{\infty} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ (n_s-n_{ik}+j_{sa}-\mathbb{k}_2) \leq n_s \leq n_{sa}+j^{sa}-j_i-\mathbb{k}_3}}^{\infty} \frac{(n_i + j_{ik} + j_{sa} - j_s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} + \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\begin{aligned} D \geq \mathbf{n} &< n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge \\ 1 \leq j_{ik} &- j_{sa} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ j_{ik} + j_{sa} - j_s - \mathbb{k}_1 &\leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ j_{sa}^{ik} - 1 &> \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge \\ D + s - \mathbf{n} &< \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(l_s+j_{sa}-1)} \\
 &\quad \sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-1)}^{(l_s+j_{sa}-1)} \\
 &\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-k_1+1)} \sum_{n_{ik}=n_{sa}+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - j_{sa} + 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_{sa} + 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - j_{sa} + 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 &\quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}} \sum_{(j^{sa}=l_s+j_{sa})}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_s}^{n_i+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j_l+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{n_s=n-j_l}^{n_{sa}+j_{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_s - 1)!}{(j_s - 2) \cdot (n_i - n_s - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1) \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1) \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1) \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\phantom{j}\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\phantom{j}\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_t+\mathbf{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_s+j_{sa}-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i) \cdot (\mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{ik} \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_s > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + s - \mathbf{n} < l_i \leq \dots + l_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge s - \mathbb{k} > 0 \wedge$$

$$j_{sa} - j_{sa}^{i-1} \wedge j_{sa}^{i-1} - j_{sa} - 1 < j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_z = s - \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_i+\mathbf{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_t+\mathbf{n}+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - j^{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_{ik} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_t+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - 1)!}.$$

$$\frac{(l_s - l_s)!}{(j_s - j_s - 1)! \cdot (n - j_i)!}.$$

~~Y~~

~~A~~

$$\frac{(l_{ik} - l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{sa} - j_{ik} - l_{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{n_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}.$$

~~$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$~~

~~$$\frac{(\mathbf{n} - 1)!}{(n_s + \mathbf{n} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$~~

~~$$\frac{(l_s - 2)!}{(l_s - \mathbf{n} - 1)! \cdot (j_s - 2)!}.$$~~

~~$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s - l_{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$~~

~~$$\frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$~~

~~$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$~~

$$\sum_{k=1}^{\binom{n}{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{n}{l}}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\binom{n}{l}} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}^{\binom{n}{l}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\binom{n_i-j_s+1}{l}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\binom{n_i-j_s+1}{l}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{n}{l}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\binom{n}{l}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(\mathbf{l}_i + \mathbf{n} - D - s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^n \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - \mathbf{n})!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - s)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(n - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=s+1, i_s=l_i+n-D-s+1}^{l_{ik}}$$

$$\sum_{=j_s+j_{sa}}^{l_{ik}} \sum_{=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(n-j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}$$

$$\sum_{=\mathbf{n}+\mathbb{k} \ (n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - \mathbf{l}_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{\mathbf{k}_1, \mathbf{k}_2, \mathbf{k}_3} \sum_{\substack{j_{ik} = l_i + n - D - s \\ j_{sa} = l_i + n - D - s}} \sum_{\substack{j_i = j - s - l_i - l_{sa} \\ j_{sa} = l_i + n - D - s}}$$

$$\sum_{\substack{j_{ik} = j_s + j_{sa} - 1 \\ (j^{sa} = j_{ik} - j_{sa} - j_{sa}^{ik})}} \sum_{\substack{j_i = j - s - l_i - l_{sa} \\ j_{sa} = l_i + n - D - s}}$$

$$\sum_{\substack{n \\ n + \mathbf{k}_1 \\ (n_{is} = n + \mathbf{k}_1)}} \sum_{\substack{n_{ik} = n_{is} + j_s - j_{ik} - \mathbf{k}_1 \\ n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbf{k}_2}} \sum_{\substack{n_s = n_{sa} + j^{sa} - j_i - \mathbf{k}_3 \\ n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbf{k}_2}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D < \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbf{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{(j_{ik}-j_{sa}^{ik})} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} \\
&\quad \sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa})}^{( )} l_{s+s} \\
&\quad \sum_{n_i=n}^{n} \sum_{(n_{is}=n+i-1+1)}^{(i+1)} n_{ik}=n-i+k-1+j_{ik}+1 \\
&\quad \sum_{(n_{sa}=n-k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
&\quad \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot \\
&\quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
&\quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.
\end{aligned}$$

g i u d i n

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}} \sum_{(j_{sa}=j_i+l_{sa}-1)}^{\left(\right)} \sum_{j_i=l_s+s}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_i-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}-1}^{n_{is}+j_s-\mathbb{k}_1} n_{ik}$$

$$\sum_{(n_{sa}+j_{sa}-j_i-1)}^{(n_{ik}+j_{ik}-j_{sa}-1)} \sum_{(n_{sa}+j_{sa}-j_i-1)}^{(n_{sa}+j_{sa}-j_i-1)}$$

$$\frac{(n_{is}-\mathbb{k}_1-1)!}{(2) \cdot (n_{is}-n_{is}-1)!}.$$

$$\frac{(n_{is}-\mathbb{k}_1-1)!}{(j_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{sa}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}.$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_{sa}+n+s-D-i}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-\mathbb{k}_1-j_{ik}-\mathbb{k}_1}^{\left(\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_2)}^{\left(\right)} \sum_{n_{is}=n_{sa}+j^{sa}-j_i}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2 - \mathbb{k}_2 - j_{sa})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_2)! \cdot (\mathbf{n} + l_{sa} + j_{sa} - j^{sa} - j_{sa})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq n - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_i - \mathbf{n} < l_{sa} \leq n + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$\geq \mathbf{n} < n \wedge I = \mathbb{k} > 0$$

$$j_{sa} = j_i - 1 \wedge j_{sa} - j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$> 6 \wedge s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{\left(\right)}$$

**gündemi**

$$\begin{aligned}
 & \sum_{j_{ik}=\mathbf{l}_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(\mathbf{l}_s+j_{sa}-1)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}^{n_i-j_s+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}-1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
 & \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}) \cdot (n_i+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (j_s-n_i-j_{ik}-\mathbb{k}_1)!} \\
 & \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j^{sa}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
 & \frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!} \cdot \\
 & \frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} + \\
 & \sum_{k=1}^{(\mathbf{l}_s)} \sum_{(j_s=2)}^{(j_s)} \\
 & \sum_{j_{ik}=\mathbf{l}_{ik}+\mathbf{n}-D}^{\mathbf{l}_{ik}} \sum_{(j^{sa}=\mathbf{l}_s+j_{sa})}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}
 \end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - \mathbb{k}_1 - 1)!}{(j_{ik} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_{ik} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\phantom{j}\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\phantom{j}\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(\mathbf{l}_s+j_{sa}-1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k} \cdot z = 3 \wedge z = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!} \cdot$$

~~$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$~~

~~$$\frac{(-1)!}{(n_s + l_i - \mathbf{n} - 1)! \cdot (n_s - j_i)!} \cdot$$~~

~~$$\frac{(l_s - 2)!}{(l_s - \mathbf{n})! \cdot (j_s - 2)!} \cdot$$~~

~~$$\frac{(l_{ik} - j_{sa} - j_{ik} + 1)!}{(j_s + l_{ik} - l_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$~~

~~$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$~~

~~$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$~~

$$\sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 1)!}{(l_s - j_{ik})! \cdot (l_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(j_{ik} + j_{sa} - l_{ik} - l_s)! \cdot (l_{ik} - j_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j^{sa} - l_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{ik} + 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa})}$$

$$\sum_{\substack{j_{ik}=l_{sa}+j_{sa}^{ik}-l_{sa}-j_{sa} \\ l_s+j_{sa}^{ik}-1}} \sum_{\substack{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}} \sum_{\substack{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s : \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& \sum_{(j_s=2)}^{} \left( \sum_{(j_i=j^{sa}-l_{sa})}^{} \left( \sum_{(n_{is}=n+\mathbb{k}_1+1)}^{} \left( \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{} \left( \sum_{(l_{ik}=l_i-n-D)}^{} \left( \sum_{(j_i=j^{sa}+l_i-l_{sa})}^{} \right) \right) \right) \right) \right) \\
& \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(-1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(-1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(-j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - i_s)! \cdot (i_s - 2)!}.
\end{aligned}$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=1}^{\mathbf{l}_{ik}} \sum_{l_{sa}+n-\mathbf{l}_s=j_{sa}+1}^{(\mathbf{l}_{ik}-\mathbf{l}_s)+1} \Delta_{l_{sa}+n-\mathbf{l}_s, j_{sa}+1}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\mathbf{l}_{ik}} \sum_{i_{ik}+j_{sa}-j_{ik}=i_i=j^{sa}+\mathbf{l}_i-l_{sa}}^{(n-s)} \sum_{i_i=j^{sa}+\mathbf{l}_i-l_{sa}}^{(n-s)}$$

$$\sum_{n_i=n+\mathbb{k}}^{\mathbf{l}_i} \sum_{(n_{ik}-\mathbb{k}-j_s+\mathbb{k}_1)-j_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_i-\mathbb{k})+1} \sum_{(n_{ik}-\mathbb{k}-j_s+\mathbb{k}_1)-j_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_i-\mathbb{k})+1}$$

$$\sum_{(n_{sa}-\mathbb{k}_3-j^{sa}+1)-n_s=n-j_i+1}^{(n_{ik}-\mathbb{k}_2-j^{sa}-\mathbb{k}_2)-n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=n-j_i+1}^{(n_{sa}-\mathbb{k}_3-j^{sa}+1)-n_s=n-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}^{(l_s)} \\ \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{\infty} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa})}^{\infty} \sum_{i^{sa} = j_{sa} + j_{sa}^{ik} - l_{sa}}^{\infty} \\ \sum_{n_i = n + \mathbb{k} (n_i - j_s + 1)}^n \sum_{n_{ik} = n_i + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s + 1)} \\ \sum_{(n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)}^{\infty} \sum_{i = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{\infty}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - j_s + \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + i + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq s + s - j_{sa} \wedge$$

$$1 \leq j_{sa} \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_s + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} + j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\ )} \sum_{j_i=s}^{l_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\dots-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j_i+1}^{n_{ik}+j_{ik}-j^{sa}} \sum_{(n_{sa}+j^{sa}-i-\mathbb{k}_3)}^{(n_{sa}-j_i+1)}$$

$$\frac{(n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}.$$

$$\frac{(n_i-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}.$$

$$\frac{(n_i-n_s-1)!}{(n_{sa}-j^{sa}-1)\cdot(n_{sa}+j^{sa}-n_s-j_i)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-j^{sa}-l_{ik})!\cdot(j^{sa}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)!\cdot(\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}^{(\ )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{( )}^{( )} (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - l_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} \wedge l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 - \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=1)}^{( )} ( )$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=s}^{l_{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(\mathbf{l}_{sa} + j_{sa}^{ik} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=1}^{\infty} \binom{(\ )}{\sum_{j_{ik}=j_{sa}^{ik}}^{\infty} \dots} \sum_{j_i=s}^{\infty}$$

$$\sum_{\substack{j_{ik}=j_{sa}^{ik} \\ j_{ik}=n+\mathbb{k}}}^n \sum_{\substack{( ) \\ j_i=s}}^{\infty} \sum_{\substack{( ) \\ j_i=k_1+1}}^{\infty} \sum_{\substack{( ) \\ j_i=s}}$$

$$\sum_{\substack{j_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ j_{sa}=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}}^{\infty} \sum_{\substack{( ) \\ ( )}}^{\infty}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!} \cdot$$

$$\geq \mathbf{n} < n \wedge \mathbf{l}_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + s = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(l_i+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_s}^{(l_i+j_{sa}-s)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{j^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)=n-j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1)}{(j_{ik} - j - 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_i - \mathbb{k}_2 - 1)!}{(j^{sa} - j - 1)! \cdot (n_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^n \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{( )}^{( )} (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - l_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} \wedge l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 - \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(l_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(\mathbf{l}_{sa} + j_{sa}^{ik} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{\infty} \binom{(\ )}{j_{ik}}$$

$$\sum_{\substack{j_{ik}=j_{sa}^{ik} \\ j_{ik} < j_{sa}}}^{\infty} \binom{(\ )}{j_{ik}} \sum_{j_i=s}^{\infty}$$

$$\sum_{k=1}^n \binom{(\ )}{n+k} \sum_{\substack{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1 \\ j_{ik} < j_{sa}}}^{\infty}$$

$$\sum_{\substack{j_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ j_{sa} < j_{sa}^{ik}}}^{\infty} \binom{(\ )}{j_{sa}} \sum_{\substack{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3) \\ j_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}^{\infty}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$\geq \mathbf{n} < n \wedge \mathbf{l}_s = 1 \wedge I \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + j_s \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=1)}^{(\ )}$$

$$\begin{aligned} & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\ )} \sum_{j_i=s}^{l_i} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \\ & \sum_{n_{ik}+j_{ik}-j_{sa}=n_i-\mathbb{k}_2-(n_{sa}+j^{sa}-\mathbb{k}_3)}^{n_{ik}+j_{ik}-j_{sa}} \sum_{j_{sa}=n-j_i+1}^{(n_{sa}+j^{sa}-\mathbb{k}_3)} \\ & \frac{(n_{ik}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \\ & \frac{(n_{ik}-n_{ik}-\mathbb{k}_2-1)!}{(j^{sa}+n_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\ & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\ & \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \end{aligned}$$

$$\frac{(l_{ik}-j_{sa})!}{(l_{ik}-j_{ik})! \cdot (j_{ik}-j_{sa})!} \cdot$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}^{l_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{( )}^{( )} (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} \wedge l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 - \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=s}^{l_{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - j_{sa}^{ik})!}{(\mathbf{l}_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=1}^{\infty} \binom{(\ )}{\sum_{j_{ik}=j_{sa}^{ik}} j_{ik}}$$

$$\sum_{j_{ik}=j_{sa}^{ik} \cup \dots \cup j_{ik} = s} \binom{(\ )}{\sum_{j_i=s} j_i}$$

$$\sum_{n+\mathbb{k} \leq n_{ik} = n_i - j_{ik} - \mathbb{k}_1 + 1}^n \sum_{j_i=s} \binom{(\ )}{\sum_{j_i=s} j_i}$$

$$\sum_{j_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \binom{(\ )}{\sum_{j_{sa} = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} j_{sa}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$\geq \mathbf{n} < n \wedge \mathbf{l}_s = 1 \wedge l_s \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} - s > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\ )} \sum_{j_i=s}^{l_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{j^{sa}+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1)}{(j_{ik} - j - 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_i - \mathbb{k}_2 - 1)!}{(j^{sa} - j - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^n \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}^{(\ )}$$

$$\sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{( )}^{( )} (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} \wedge l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 - \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_{sa})}^{(l_i+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_{ik} - j_{sa}^{ik})!}{(\mathbf{l}_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{\infty} \binom{(\ )}{j_{ik} - j_{sa}^{ik}}$$

$$\sum_{\substack{j_{ik}=j_{sa}^{ik} \\ j_{ik} < j_{sa}^{ik}}} \binom{(\ )}{\sum_{j_i=s}^{j_{ik}} j_i} \sum_{j_i=s}^{j_{ik}}$$

$$\sum_{k=1}^n \sum_{\substack{j_{ik}=n_i+\mathbb{k} \\ (n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}} \binom{(\ )}{j_{ik} - j_{sa}^{ik}}$$

$$\sum_{\substack{j_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}} \binom{(\ )}{j_{sa} - j_{sa}^{ik}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$\geq \mathbf{n} < n \wedge \mathbf{l}_s = 1 \wedge l_s \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} - 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\begin{aligned} & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_{sa})}^{(l_{sa})} \sum_{j_i=j^{sa}+l_i-l_s} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \\ & \sum_{n_{ik}+j_{ik}-j_{sa}=n_i-\mathbb{k}_2-(n_{sa}+j^{sa}-\mathbb{k}_3)}^{n_{ik}+j_{ik}-j_{sa}} \sum_{(j_{sa}=n-j_i+1)} \\ & \frac{(n_{ik}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \\ & \frac{(n_{ik}-n_{ik}-\mathbb{k}_2-1)!}{(j^{sa}+l_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\ & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\ & \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \end{aligned}$$

$$\frac{(l_{ik}-j_{sa})!}{(l_{ik}-j_{ik})! \cdot (j_{ik}-j_{sa})!} \cdot$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} \wedge l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 - \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - j_{sa}^{ik})!}{(\mathbf{l}_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=1}^{\infty} \binom{(\ )}{\sum_{j_{ik}=j_{sa}^{ik}} j_{ik}} \cdot$$

$$\sum_{j_{ik}=j_{sa}^{ik} \cup \dots \cup j_{ik} = s} \binom{(\ )}{\sum_{j_i=s}^n} \cdot$$

$$\sum_{k=1}^n \binom{(\ )}{\sum_{j_{ik}=n+\mathbb{k} \quad (n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)} j_{ik}} \cdot$$

$$\sum_{j_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \quad (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \binom{(\ )}{\sum_{j_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \cdot$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!} \cdot$$

$$\geq \mathbf{n} < n \wedge \mathbf{l}_s = 1 \wedge l_s \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_{ik} \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} - s > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{(j_s=1)}^{(\ )}$$

$$\begin{aligned} & \sum_{j_{ik}=j_{sa}^{ik}}^{l_i+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(\ )} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n_i-j_{sa}-\mathbb{k}_2+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \\ & \sum_{(n_{sa}+j^{sa}-j_{sa})}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(j_{sa}+1)}^{(n_{sa}+j^{sa}-j_{sa})} \\ & \frac{(n_i - n_{ik} - \mathbb{k}_1)}{(j_{ik} - s)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ & \frac{(n_{ik} - j_{ik} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ & \frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^n \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}^{(\ )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{( )}^{( )} (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - l_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} \wedge l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 - \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{( )}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_{ik} - j_{sa}^{ik})!}{(\mathbf{l}_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{\infty} \binom{(\ )}{j_{ik} - j_{sa}^{ik}}$$

$$\sum_{\substack{j_{ik}=j_{sa}^{ik} \\ j_{ik} < j_{sa}^{ik}}} \binom{(\ )}{\sum_{i=1}^n j_i} \sum_{j_i=s}^{\infty} \binom{(\ )}{j_i}$$

$$\sum_{k=1}^n \binom{(\ )}{n+k} \sum_{\substack{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1 \\ j_{ik} < j_{sa}^{ik}}} \binom{(\ )}{n_{ik}}$$

$$\sum_{\substack{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ j_{ik} < j_{sa}^{ik}}} \binom{(\ )}{n_{sa}} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ j_{sa}^{ik} < j_{sa}^{ik}}} \binom{(\ )}{n_s}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$\geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} - s > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge l_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\begin{aligned} & \sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=j^{sa}+l_i-l_s}^{(\ )} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \\ & \sum_{j^{sa}+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(n_{sa}+j^{sa}=n_i-j_{ik}-\mathbb{k}_3)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \\ & \frac{(n_i-n_{ik}-\mathbb{k}_1)}{(j_{ik}-j-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \\ & \frac{(n_{ik}-n_i-\mathbb{k}_2-1)!}{(j^{sa}-j-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\ & \frac{(n_{sa}-n_s-1)!}{(j_i-j-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\ & \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\ & \frac{(l_{ik}-j_{sa})!}{(l_{ik}-j_{ik})! \cdot (j_{ik}-j_{sa})!} \cdot \end{aligned}$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}^{(\ )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - l_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} \wedge l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 - \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{sa})} \sum_{(j^{sa}=j_{sa})}^{l_i} \sum_{j_i=s}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_{ik} - j_{sa}^{ik})!}{(\mathbf{l}_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_{sa} - s)!}$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{\substack{j_{ik}=j_{sa}^{ik} \\ (j_{ik}-j_{sa}^{ik}) \geq 1}} \sum_{(j_s=1)} \sum_{(j_l=s)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(j_l=s)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - j_{ik} - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$D > \mathbf{n} < n \wedge \mathbf{l}_s = 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )} \cancel{\frac{(l_{ik}+j_s-j_{sa}^{ik})!}{j_{ik}=j_{sa}+l_{ik}-i_{sa}+j_{sa}} \sum_{j_t=s}^{\infty} \sum_{(n_i=j_{ik}-\mathbb{k}_1)}^{l_i} \cancel{\sum_{n_{ik}=j_{sa}+j_{ik}-\mathbb{k}_2}^{n}} \cancel{\sum_{n_{sa}=n+j_{ik}-\mathbb{k}_3+1}^{(n_i-j_{ik}-\mathbb{k}_1)}}} \\ \cancel{\sum_{n_{ik}=j_{sa}+j_{ik}-\mathbb{k}_2+1}^{n-\mathbb{k}_2} \sum_{n_{sa}=n+j_{ik}-\mathbb{k}_3+1}^{(n_i-j_{ik}-\mathbb{k}_1)}}} \\ \cancel{\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(n_i - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}} \cdot \\ \cancel{\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}} \cdot \\ \cancel{\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}} \cdot \\ \cancel{\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}} \cdot \\ \cancel{\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}} \cdot \\ \cancel{\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}} \cdot \\ \cancel{\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}} - \\ \sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{L}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{L}_1)^+}^{(\ )}$$

$$n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2 \quad (n_s = n_{sa} + \dots + j_i - \mathbb{k}_3)$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{si})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{si})!}.$$

$$\frac{-l_i)!}{(1)! \cdot (n-s)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_i \leq D + s - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \dots \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{il} \quad j_{sa} = \dots \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \dots \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \dots + \mathbb{k}_3 \rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=1)} ( )$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{sa}+j_{sa}^{ik}-j_{sa}} \left( \sum_{j_{ik}=j_{ik}+l_{sa}-l_{ik}}^{( )} \right) \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n+\mathbb{k}_3-j^{sa}+1}}^{\substack{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3) \\ (n_s=n-j_i+1)}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - l_i - j_{ik} - l_{sa})! \cdot (l_{ik} - j_{sa}^{ik})!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\infty} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}^{(\ )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\infty} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_s-n_{sa}-\mathbb{k}_2-1)} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ \frac{(\mathbf{l}_{ik} - j_{sa}^{ik})!}{(\mathbf{l}_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\ \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )} \sum_{(j_{ik} \leq j_{sa})}^{(\ )} \sum_{j_i=s}^{(\ )}$$

$$n_{l_i} + \mathbb{k} (n_{ik} = n_i - j_{ik} - 1)$$

$$n_{sa} = n_{ik} + j_{sa} - s - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik} - j_i - \mathbb{k}_3$$

$$\frac{(n_i + j_{ik} + j_{sa} - j_{sa}^{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n - j_{ik} + j_{sa} - j_{sa}^{ik} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_i \leq n + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > 1 \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}^{(\ )}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik})}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \\
& \sum_{n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - 1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} - n_{ik} - j^{sa} - \mathbb{k}_2)!} \\
& \frac{(n_i - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
& \frac{(\mathbf{n}_s - 1)!}{(n_s - j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
& \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \sum_{k=1}^n \sum_{(j_s=1)}^{\left(\right)} \\
& \sum_{j_{ik}=j_{sa}^{ik}}^{n} \sum_{(j^{sa}=j_{sa})}^{\left(\right)} \sum_{j_i=s} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{\left(\right)} \\
& \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{n} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{\left(\right)}
\end{aligned}$$

g i u l d i n g

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s = 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

**GÜNDÜZUN YAYA**

$$\sum_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{\mathbf{n}}{s}} \sum_{(j_s=1)}^{\binom{\mathbf{n}}{s}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\mathbf{l}_{sa})} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}^{n_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_{ik} - j_{sa}^{ik})!}{(\mathbf{l}_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=1}^{\infty} \binom{\mathbf{n}}{j_{sa}^{ik}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\infty} \binom{\mathbf{n}}{(j^{sa}-j_{sa})} \sum_{j_i=s}^{\infty}$$

$$\sum_{n=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{\infty} \binom{\mathbf{n}}{(n_s-n_i+j_{sa}-j_i-\mathbb{k}_3)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\infty} \binom{\mathbf{n}}{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$s \geq \mathbf{n} < n \wedge \mathbf{l}_s = 1 \wedge l_s \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_i < j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{D}{2}} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\binom{D}{2}} \sum_{j_i=s}^{l_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}-\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{j^{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2} \sum_{(n_{sa}+j^{sa}-j_{sa}-\mathbb{k}_3)}^{(n_i-j_i+1)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1)}{(j_{ik} - j - 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_i - \mathbb{k}_2 - 1)!}{(j^{sa} - j - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}.$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{D}{2}} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{( )} \sum_{(j^{sa}=j_{sa})}^{\binom{D}{2}} \sum_{j_i=s}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_1)}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)}{(D + s - l_i - 1)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa}^{ik} \leq j_i - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} = j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z=3 \wedge \mathbb{k} = \mathbb{k}_1 - \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\ )} \sum_{j_i=s}^{l_{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(j_{sa} - j_{sa}^{ik})!}{(j_{ik} - j_{sa}^{ik})! \cdot (j_{sa} - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - 1)! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - s - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=1}^{\binom{r}{s}} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{\binom{r}{s}} \sum_{j_i=s}^{(\ )}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{\binom{r}{s}}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{\binom{r}{s}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(j_s = j_{ik} + l_s - l_{ik})} \sum_{j_{sa} = l_{sa} + n - D}^{(j_i + j_{sa} - s)} \sum_{j_i = l_i + n - D}^n$$

$$\sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{n} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{(n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{n_{sa} = n + \mathbb{k}_3 - j_{sa} + 1}^{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2)}$$

$$\sum_{n_s = n - j_i + 1}^{n_{sa} + j_{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=1}^{\infty} \sum_{\substack{(j_s=j_{ik}-l_s-l_{ik})}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i=l_i+n-D}^{\left(\begin{array}{c} \\ \end{array}\right)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{\substack{(j^{sa}=j_i+j_{sa}-s)}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i=l_i+n-D}^{\left(\begin{array}{c} \\ \end{array}\right)}$$

$$\sum_{n_i=n+\mathbb{k}_1, n_s=n+\mathbb{k}_2-s-1}^{\left(\begin{array}{c} \\ \end{array}\right)} n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1$$

$$\sum_{n_a=n_{ik}+j_{ik}-s-\mathbb{k}_2}^{\left(\begin{array}{c} \\ \end{array}\right)} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} - \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + s = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} - \mathbf{n} \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+\mathbf{n}-}^{\mathbf{n}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbb{k}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1} \\
& \sum_{j^{sa}+1}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-\mathbb{k}_3}^{n_{sa}+j^{sa}-\mathbb{k}_3} \\
& \frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - l_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_i - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right)} \sum_{j_i=l_i+\mathbf{n}-D}^{\mathbf{n}}
\end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - i = l_{ik} \wedge l_{sa} \wedge j_{sa} - s > 0 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^l\}$$

$$s \leq 6 \wedge s = 1 \wedge \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + 1$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{n} \sum_{(j^{sa}=l_s+n+j_{sa}-D-1)}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{+ j_i - j_s - 1 \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathfrak{l}_s - \mathfrak{z})!}{- j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathfrak{l}_i + j_{ik} - l_{sa} - s)!}{(j^{sa} - \mathfrak{l}_i - j_i - l_{sa} - 1 \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right.\left.\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right.\left.\right)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right.\left.\right)} \sum_{j_i=l_i+n-D}^{\mathbf{n}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_l-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\mathbf{n}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.\left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left(\right.\left.\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\varsigma_{i_k, l_{ik}, j_{ik}, j_i} = \sum_{k=1}^{\binom{\mathbf{n}}{2}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_i+\mathbf{n}+j_{sa}-D-s-1)} \sum_{j_i=l_i+\mathbf{n}-D}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 1)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(l_i)!}{(D + j - n - l_i)!} \frac{(j_i)!}{(j_i)!} +$$

$$\sum_{(s_i+l_s-l_{ik})} \left(\right)$$

$$\sum_{j_{sa} = l_{ik} - l_{sa}}^{s^a + l_{ik} - l_{sa}} \sum_{(n+jsa - l_{ik})_i = n + j_{sa} - l_{ik}}^{(n+l_{ik} - s^a)_i} \sum_{j_i = j^{sa} + s - j_{sa}}^n$$

$$\sum_{\substack{n \in \mathbb{K} \\ n = n_{is} + \mathbb{K}_1 - j_s + 1}} \sum_{\substack{i, k \\ i_k = n + \mathbb{K}_2 + \mathbb{K}_3 - j_{ik} + 1}} \sum_{\substack{j \\ j_{ik} = n_{is} + j_s - i_k - \mathbb{K}_1}}$$

$$\sum_{(n_{sa} = n + \mathbb{L}_3 - j^{sa} + 1)} \sum_{n_s = n - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{\substack{j_s = j_{ik} + l_s - l_{ik} \\ (j^{sa} = \mathbf{l}_i + n + j_{sa})}}^{\infty} \sum_{\substack{(n+j_{sa}-s) \\ (j^{sa} = j^{sa} - j_{sa})}}^{\infty} \sum_{\substack{(n_i - j_s + 1) \\ (n_i = n + \mathbb{k}_1)}}^{\infty} \sum_{\substack{(n_i - j_s + 1) \\ (n_i = n + \mathbb{k}_1)}}^{\infty} \sum_{\substack{(n_i - j_s + 1) \\ (n_i = n + \mathbb{k}_1)}}^{\infty}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - j_{ik} - j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})! \cdot (\mathbf{n} + j_i + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \leq \mathbf{n} < n \wedge \mathbf{l}_s \leq D - \mathbf{n} - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{sa} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = j_{sa} - j_{sa}^{ik} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge J = \mathbb{k} > 0 \wedge$$

$$j_{sa}^s < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=l_i+n-D}^{(l_i+\mathbf{n}+j_{sa}-D-s-1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_i-k_1+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\begin{array}{c} (n_{ik}+j_{ik}-j^{sa}) \\ \diagdown \quad \diagup \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j_s+1) \quad n_s=\mathbf{n}-j_i+\mathbb{k}_3 \end{array}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{ik} - j_s + 1)!} \cdot$$

$$\frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - \mathbf{n} - a - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\mathbf{n}+j_{sa}-s)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} + n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j^{sa} - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{is} + j_i - n_{is} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} - \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\quad)}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{(\mathbf{n}+j_{sa}-s)} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{(n_i-j_s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right. \left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(\quad)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathfrak{l}_s - 2)!}{(\mathfrak{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - l_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathfrak{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots + \mathbb{k}_s \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{\mathfrak{n}}{2}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{j_{ik} = j^{sa} + l_{ik} - l_{sa}}^{(l_i + \mathbf{n} + j_{sa} - D - s - 1)} \sum_{(j^{sa} = l_s + \mathbf{n} + j_{sa} - D - 1)}^n \sum_{j_i = l_i + \mathbf{n} - D}^n$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_s - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa}) \cdot (j_i + j_{sa} - \mathbf{l}_s - s)!}.$$

$$\frac{(\mathbf{l}_i - l_i)!}{(i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{i=1}^{\mathbf{n}} \sum_{(j_s = j_{ik} + l_s - \mathbf{l}_{ik})} \dots$$

$$\sum_{j_{sa}=j_{ik}+l_{sa}-\mathbf{l}_{sa}}^{(n_{sa}-n_i-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}-l_s-l_{ik})}^{\binom{\cdot}{\cdot}}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=l_i+n+j_{sa}-s)}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^{\infty}$$

$$\begin{array}{c} n \\ \triangle \\ n_i = n + \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 1 \\ \vdots \\ n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1 \end{array}$$

$$\sum_{a=n_{ik}+j_{ik}-s-\mathbb{k}_2}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\infty}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} > \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + s = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{n}{l_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
& \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\binom{n}{l_{ik}}} \sum_{j_i=l_i+n-j_s}^n \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}-j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2)}^{(n_{is}-\mathbb{k}_1-1)!} \sum_{n_{sa}+j^{sa}-j_{sa}-\mathbb{k}_3}^{n_{sa}+j^{sa}-j_{sa}-\mathbb{k}_3} \\
& \frac{(n_i - n_{is})!}{(j_s - 2) \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_i - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - n_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{k=1}^{\binom{n}{l_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}
\end{aligned}$$

gündem

$$\begin{aligned}
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_i+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

g i u l d u

$$\sum_{\substack{( ) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}^{\sum_{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\sum_{( )}} \sum_{(j_s=j_{ik}+l_s-l_s)}^{\sum_{( )}}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_s)}^{\sum_{( )}} \sum_{j_i=l_i+\mathbf{n}-D}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(l_s - 1)!}{(l_s - j_s) \cdot (l_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - s)! \cdot (j_i + j^{sa} - n - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_l - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_s)}^{\infty}$$

$$\sum_{j_{ik}=l_i-1-j_s^{ik}-D-s}^{n+j_{sa}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_s)}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{\infty} \sum_{(j_s = j_{ik} + l_s - k)} \dots$$

$$\sum_{\substack{i \\ j_{ik}=l_i+n+j_s \\ i=n+\mathbb{k}}}^{n+j_{sa}-s} \sum_{\substack{( ) \\ D-s-(j^{sa}+j_{sa}-l_{ik}) \geq n \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}} \dots$$

$$\sum_{\substack{n \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}}^{n} \sum_{\substack{( ) \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_3}} \dots$$

$$\frac{(n_i + \dots + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \dots - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D > \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_k)}^{\infty} \\
&\quad \sum_{l_i+n+j_{sa}^{ik}-D-s-1}^{\infty} \sum_{(j_{ik}=l_s+n+j_{sa}^{ik}-D-1)}^{\infty} \sum_{j_i=n-D}^{\infty} \\
&\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
&\quad \sum_{(n_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_3-j_i-\mathbb{k}_3)}^{(n_{ik}-n+\mathbb{k}_3-j_{ik}-1)} \sum_{n_s=n-j_i+1}^{n_{is}-j_i} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - l_i)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - l_i - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(n_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot \\
&\quad \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
&\quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_k)}^{\infty}
\end{aligned}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^n \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-\mathbb{k}_1+1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_i+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

**gündü**

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left.\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\ \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(n)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(n)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right.} \sum_{j_i=l_i+n-D}^{\left.\right)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 1)!}{(l_s - j_s) \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_l - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s = l_i + \mathbf{n} - D - s + 1)}^{(n)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s}^{\mathbf{n}} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{(\mathbf{n})} \sum_{j_i = j^{sa} + s - j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^{\mathbf{n}} \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{j_{ik} = j_{sa} + l_{ik} - l_s \\ j_{ik} = j^{sa} + l_{sa} - l_{ik}}} \sum_{\substack{( ) \\ j_{sa} = l_{sa} + n - D - j_{ik}}} \sum_{\substack{(n-i+1) \\ (j_s = l_t + n - D - j_{ik})}}$$

$$\sum_{\substack{j_{ik} = j_{sa} + l_{ik} - l_s \\ j_{ik} = j^{sa} + l_{sa} - l_{ik}}} \sum_{\substack{( ) \\ j_{sa} = l_{sa} + n - D - j_{ik}}} \sum_{\substack{(n-i-j_s+1) \\ (j_s = l_t + n - D - j_{ik})}}$$

$$\sum_{\substack{i=n+\mathbb{k} \\ i=n+\mathbb{k} \\ i=n+\mathbb{k}}} \sum_{\substack{(n_i-j_s+1) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \sum_{\substack{( ) \\ (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3) \\ (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}}$$

$$\frac{(\mathbf{n}_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(\mathbf{n}_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i \wedge j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i+n-D-s)} \\
&\quad \sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}-l_{ik}+1)}^{\binom{n}{l_{ik}}} \sum_{j_i=j_s-n-D}^n \\
&\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}_2-\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
&\quad \sum_{(n_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_3-j_i-\mathbb{k}_3)}^{(n_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_3-j_i-\mathbb{k}_3)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1-1} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - l_s)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - l_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
&\quad \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
&\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-s+1)}
\end{aligned}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\binom{(\ )}{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{sa}-j_i+1}$$

$$\frac{(n_i-\mathbf{n}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)\cdot(j_s+n_{is}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{is}-1)!\cdot(n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-n_{isa}-1)!\cdot(n_{is}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)!\cdot(j_s-2)!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})!\cdot(j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)!\cdot(\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\binom{(\ )}{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{( ) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}^{\sum_{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\sum_{( )}} \sum_{j_i=l_i+n-D}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

~~$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}$$~~

~~$$\frac{(l_s - 1)!}{(l_s - j_s) \cdot (\mathbf{n} - 2)!}$$~~

~~$$\frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - \mathbf{n} - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$~~

~~$$\frac{(D - 1)!}{(D + j_l - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$~~

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s = l_i + \mathbf{n} - D - s + 1)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s}^n \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{j_{ik} = \max(j_{ik} - l_s, j^{sa} - l_{sa} + l_{ik})}^{\min(n_i - j_s + 1, n_{sa} - j_{sa})} \sum_{n_{ik} = n_i + j_{ik} - j^{sa} - \mathbb{k}_1}^{n_i - j_s + 1} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{n_{sa} - j_{sa}}$$

$$\sum_{n_{ik} = n_i + \mathbb{k}_1}^n \sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}^{n_i - j_s + 1} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{n_{sa} - j_{sa}}$$

$$\frac{(\mathbf{n}_i + \mathbf{n}_s + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(\mathbf{n}_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge \\ 2 \leq j_s \leq j_i \wedge j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ \mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_i)}^{\infty} \\
&\quad \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{ik}=j_{sa}+l_i-j_i)}^{\infty} \sum_{j_i=n-D}^n \\
&\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
&\quad \sum_{(n_{ik}=n+\mathbb{k}_3-j_{ik}+1)}^{(n_{ik}-j^{sa}-j_{sa})} \sum_{n_s=n-j_i+1}^{n-j_i-\mathbb{k}_3} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - j_{sa} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
&\quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{\binom{n}{l_i}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{n}{l_i}} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+l_i-l_{sa})}^{\binom{n}{l_i}} \sum_{j_i=l_i+n-D}^n \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1 \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\dots)}^{\binom{n}{l_i}} n_s=n_{sa}+j^{sa}-j_i \\
 & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \dots - \mathbb{k}_2 - \mathbb{k} - j_{sa})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k} - \mathbb{k}_2)! \cdot (n + l_{ik} + j_{sa} - j^{sa} - \dots - j_{sa})!} \\
 & \frac{(l_s - 2)!}{(\mathbb{k} - j_s)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n - 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^s - 1 \leq j_{ik} \leq n - a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^s - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa}^s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D \geq n < n \wedge I = \mathbb{k} - 0 \wedge$

$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^s, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$

$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{n}{l_i}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{n}{l_i}}$$

**giudi**

$$\begin{aligned}
& \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_i+n-D}^{\mathbf{n}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_i-1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{is}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_i+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
& - \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
& - \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+l_i-l_{sa})}^{\left(\right)} \sum_{j_i=l_i+n-D}^{\mathbf{n}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\left(\right)}
\end{aligned}$$

$$\sum_{\substack{( ) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}^{\sum_{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\sum_{( )}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\sum_{( )}}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(n+j_{sa}-s)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - \mathbb{k}_2)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j_{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{r}{s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{r}{s}}$$

$$\sum_{\substack{j_{ik}=j^{sa}+l_i-j_{sa} \\ j_{sa}=l_t+n+j_{sa}-D-s}}^{\Delta} \sum_{(j^{sa}=l_t+\mathbf{n}+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(D-l_i)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{r}{s}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\binom{r}{s}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge k = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& f(z) = \sum_{j_{ik}=l_s+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(n+j_{sa}-D-s)}^{(n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} .
\end{aligned}$$

**gündem**

$$\begin{aligned}
& \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=1}^{\binom{\mathbf{l}_i}{j_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{\mathbf{l}_i}{j_s}} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{\mathbf{n}+j_{sa}-s}{j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D}} \sum_{i_{sa}=j_{sa}-l_{sa}}^{\binom{\mathbf{n}+j_{sa}-s}{i_{sa}=j_{sa}-l_{sa}}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}_1(n_i-sa+1)}^n \sum_{n_{ik}=n_i+j_s-j_{ik}-\mathbb{k}_1}^{\binom{n_i-j_s+1}{n_{ik}=n_i+j_s-j_{ik}-\mathbb{k}_1}} \\
& \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2), \dots, (n_{sa}=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{\binom{n_i+j_{sa}-j^{sa}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^{ik}}{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2), \dots, (n_{sa}=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}} \\
& \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})! \cdot (n + j_i + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot \\
& \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \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} \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 \mathbb{k} > 0 \wedge \\
& j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\
& \mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge \\
& s \geq 6 \wedge s = s + \mathbb{k} \wedge \\
& \mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow
\end{aligned}$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{n}{l_s}} \sum_{(j_s=j_{ik}+l_s-l_s)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_i+\mathbf{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_i}^{(n+j_{sa}-s)} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j_s+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{n_s=n-j_i+\mathbb{k}_3}^{n_{sa}+j_i-j_{ik}-\mathbb{k}_3} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{ik} - j_s + 1)!} \cdot \\ & \frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \end{aligned}$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\binom{n}{l_s}} \sum_{(j_s=j_{ik}+l_s-l_s)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{n+j_{sa}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(n+j_{sa}-s)} \end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{sa} + n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{is} + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right.\left.\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\left(\right.\left.\right)}$$

$$\sum_{j_{ik}=\mathbf{l}_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa})}^{\left(\right.\left.\right)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}^{\left(\right.\left.\right)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.\left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left(\right.\left.\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{\mathbf{n}}{j_s}} \sum_{(j_s = j_{ik} + \mathbf{l}_s - \mathbf{l}_{ik})}$$

$$\sum_{\substack{j_{ik} = \mathbf{l}_s + \mathbf{n} + j_{sa}^{ik} - D - 1 \\ (j^{sa} = l_i + \mathbf{n} + j_{sa} - D - s)}}^{l_i + \mathbf{n} + j_{sa} - D - s - 1} \sum_{\substack{(n + j_{sa} - s) \\ j_i = j^{sa} + l_i - l_{sa}}}^{(n + j_{sa} - s)}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} + j_{sa} - j_{ik} - \mathbf{l}_{sa} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i - l_i)!}{(\mathbf{n} - \mathbf{l}_i) \cdot (\mathbf{n} - n - \mathbf{l}_i) \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{i=1}^{\mathbf{n}} \sum_{\substack{j_s = j_{ik} + l_s - l_{ik}}}^{(l_s - l_{ik})}$$

$$\sum_{\substack{j_{ik} = n + j_{sa} - s \\ j_{ik} + j_{sa} - s}}^{(j_{sa}^{ik} - s)} \sum_{\substack{j_i = j^{sa} + l_i - l_{sa} \\ j_{ik} + j_{sa} - j_{sa}}}^{(j_{sa} - s)}$$

$$\sum_{\substack{n+\mathbb{k} \quad (n_{is}=n+\mathbb{k}-j_s+1) \\ n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}}^{(n_i-j_s+1)} \sum_{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ n_s=n-j_i+1}}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \quad n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ (n_{sa}=n+\mathbb{k}_3-j^{sa}+1) \quad n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{\substack{k=1 \\ j_{ik}=l_i+n+j_{sa}^{ik}-D-s \\ j_{ik}+j_{sa}-j_{sa}^{ik}=j_{ik}+j_{sa}-j_{sa}^{ik} \\ n_i=j^{sa}+l_i-l_{sa}}}^{\substack{n+j_{sa}^{ik}-s \\ n_i=n+\mathbb{k}_{ik}-j_{sa}^{ik} \\ n_{ik}=n_{is}+j_{sa}-j_{ik}-\mathbb{k}_1}} \sum_{\substack{(j_{ik}+j_{sa}-j_{sa}^{ik}) \\ (n_i-n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2) \\ n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}}^{\substack{(j_{ik}+j_{sa}-j_{sa}^{ik}) \\ (n_i-n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2) \\ n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}} \sum_{\substack{(n_i+j_{ik}+j_{sa}-j^{sa}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^{ik})! \\ (n_i-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^{ik})! \cdot (n+j_{ik}+j_{sa}-j^{sa}-s-j_{sa}^{ik})!}}^{\substack{(n_i+j_{ik}+j_{sa}-j^{sa}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^{ik})! \\ (n_i-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^{ik})! \cdot (n+j_{ik}+j_{sa}-j^{sa}-s-j_{sa}^{ik})!}}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\begin{aligned} & \geq \mathbf{n} < \mathbf{l}_s \wedge \mathbf{l}_s > D - j_{sa}^{ik} + 1 \wedge \\ & 2 \leq j_i \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & j_{sa} - j_{sa}^{ik} = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\begin{aligned} & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n+j_{sa}-s)} \sum_{(j^{sa}=l_t+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(n_i-j_s+1)} \\ & \sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}-j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1} \\ & \sum_{j^{sa}+1}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{j_i=n-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_3} \\ & \frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - l_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_i - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\ & \sum_{k=1}^{(\mathbf{n}-s+1)} \sum_{(j_s=l_t+n-D-s+1)} \end{aligned}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{is}-j_i+1}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}+1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_s+j^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{(\mathbf{n}-s+1)} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} \wedge \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(\mathbf{l}_i + \mathbf{n} - D - s)} \sum_{(j_s = \mathbf{l}_s + \mathbf{n} - D)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s}^{n + j_{sa} - s} \sum_{(j^{sa} = l_t + \mathbf{n} + j_{sa} - D - s)}^{(n + j_{sa} - s)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 1)!}{(l_s - j_s) \cdot (\mathbf{n} - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - \mathbb{k}_2)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - n - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(n-s+1)}$$

$$\sum_{j_{ik}=n+l_{ik}-l_s}^{n+j_{sa}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(n-i+1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{j_{ik}=j_s+\dots-l_s \\ (j^{sa}=j_{sa}+j_{sa}-j_{sa}^{ik})}} \sum_{\substack{i>j_{ik} \\ l_i>l_{sa}}} \sum_{\substack{(n-sa) \\ (j_s=l_i+n-D-sa)}} \dots$$

$$\sum_{\substack{s=n+\mathbb{k} \\ (n_{is}=n+\dots-j_s+1)}} \sum_{\substack{i>s-j_s+1 \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}} \sum_{\substack{(n-sa) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ (n_s=j_{sa}+j_{sa}-j_{sa}^{ik})}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \dots - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D > \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_i)}^{\infty} \\
 &\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_{ik})}^{\infty} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} n_{ik}=\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1 \\
 &\sum_{n_{ik}=n+\mathbb{k}_3-j_{ik}+1}^{(n_{ik}-j^{sa}-1)} n_s=n-j_i+1 \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - j_{ik} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -
 \end{aligned}$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+j^{ik}_{sa}-j_{sa}}^{\left(\right)} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_{sa}+n+s-D-j}^{\mathbf{n}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{\left(\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{m})}^{\left(\right)} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{m} - j_{sa})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_i + l_{ik} + j_{sa} - j^{sa} - \mathbb{m} - j_{sa})!} \cdot \frac{(l_s - 2)!}{(\mathbb{m} - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j^{ik}_{sa} + 1 \wedge j_s + j^{sa}_{sa} - 1 \leq j_{ik} \leq \mathbf{n} + j^{ik}_{sa} - j_{sa} \wedge$$

$$j_{ik} + j^{ik}_{sa} - j^{ik}_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j^{ik}_{sa} + 1 = 1 \wedge l_{sa} + j^{ik}_{sa} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} - 0 \wedge$$

$$j_{sa} < j^{ik}_{sa} - 1 \wedge j^{ik}_{sa} = j_s - 1 \wedge j^{sa}_{sa} < j^{ik}_{sa} - 1 \wedge$$

$$s: \{j^s_s, \dots, \mathbb{k}_1, j_{sa}, j^{sa}_{sa}, \dots, \mathbb{k}_3, j^i_{sa}\} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{( )}^{} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^n \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i-1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-\mathbb{k}_1+1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{is}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_i+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& - \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
& \sum_{k=1}^{\sum} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{( )}^{} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^n \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

**gündü**

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - \mathbb{k}_2)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\lfloor \frac{D}{2} \rfloor} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=s_a+j_{sa}^{ik}-j_{sa}}^{n+j_{sa}-s} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_i-j_s+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\lfloor \frac{D}{2} \rfloor} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned} f(z^{j_{sa}^{ik}}) &= \sum_{n=l_s-l_{ik}}^{\infty} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\infty} \\ &\quad \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-1} \sum_{n_{ik}=\mathbb{k}_2+n-D}^{(n_{ik}-j_{sa})} \\ &\quad \sum_{n_{is}=\mathbb{k}-(n_{ik}-j_{sa}+1)}^{\infty} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}. \end{aligned}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{D}{l_i}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{D}{l_s}} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{n+j_{sa}-s}{l_{sa}+n-j_{sa}}} \sum_{(j^{sa}=l_{sa}+n-j_{sa})}^{\binom{n_i-j_s+1}{n_i-j_s}} \sum_{n_{ik}=n_i+j_s-j_{ik}-\mathbb{k}_1}^{\binom{n_i-j_s+1}{n_i-j_s}} \sum_{(n_{sa}=n_{ik}+n_i-j^{sa}-\mathbb{k}_2)}^{\binom{n_i-j_s+1}{n_i-j_s}} \sum_{(n_{sa}=n_{ik}+n_i-j^{sa}-\mathbb{k}_3)}^{\binom{n_i-j_s+1}{n_i-j_s}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s = D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j^{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} + j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa})}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j_s+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \sum_{n_s=n-j_i+\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (\mathbf{n} - n_{is} - j_s + 1)!}.$$

$$\frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1) \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} + n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j^{sa} - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{is} + j_i - n_{is} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{\mathbf{n}}{s}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\binom{\mathbf{n}}{s}}$$

$$\sum_{j_{ik}=\mathbf{l}_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa})}^{\binom{\mathbf{n}}{s}} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}^{\binom{\mathbf{n}}{s}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\binom{\mathbf{n}}{s}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{\mathbf{n}}{s}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\binom{\mathbf{n}}{s}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathfrak{l}_s - 2)!}{(\mathfrak{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - l_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{\mathbf{n}}{\mathbf{n}}} \sum_{(j_s=j_{ik}+l_s-l_{ik})} f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-j_{sa}-1}^{n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{n+j_{sa}-s} \\ \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} + j_{sa} - j_{ik} - \mathbf{l}_{sa} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i - l_i)!}{(\mathbf{l}_i - n - \mathbf{n})! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{i=1}^{\mathbf{n}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{j_{ik}=l_{sa}-n+j_{sa}^{ik}-D}^{n-\mathbb{k}-s} \sum_{(j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n-j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n+\mathbb{k} (n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{\infty} \sum_{\substack{(j_s=j_{ik}+l_s-l_{ik})}} \sum_{\substack{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_s \\ j_{ik}+j_{sa}^{ik}-j_s=n-i_k+j_{sa}-j_{ik} \\ i_i=j^{sa}+l_i-l_{sa}}} \sum_{\substack{n_i=n+\mathbb{k}_1 \\ n_i=n+\mathbb{k}-j_s \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}} \sum_{\substack{(n_{ik}=n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2) \\ n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}} \sum_{\substack{(n_i+j_{ik}+j_{sa}-j^{sa}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^{ik})! \\ (n_i-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^{ik})! \cdot (\mathbf{n}+j_{ik}+j_{sa}-j^{sa}-s-j_{sa}^{ik})!}}$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\begin{aligned} & \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - j^{sa} + 1 \wedge \\ & 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & j_{sa} - j_{sa}^{ik} = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge \\ & D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge \end{aligned}$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_{ik}+n-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{\infty} \sum_{(j^{sa}=l_{sa}+n-D)}^{\infty} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\infty}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}-j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{j^{sa}+1}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{n_{sa}=n-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - l_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_i - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(\mathbf{n}-s+1)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(n+j_{sa}-s)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=j^{sa}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (j_s+n_i-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (j^{sa}+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_s+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(n-s+1)} \\
& \sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(\ )} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1}
\end{aligned}$$

g i u d i

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\quad)}{}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{sa} + n - D - j_{sa})} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s}^{(n + j_{sa} - s)} \sum_{(j^{sa} = l_{sa} + n - D)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 1)!}{(l_s - j_s) \cdot (\mathbf{n} - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - \mathbb{k}_2)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - n - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}$$

$$\sum_{j_{ik} = n + l_{ik} - l_s}^{(n+j_{sa}-s)} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(n+j_{sa}-s)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{k=1 \\ k=\mathbf{l}_i+j_{sa}-l_{sa}+n-D-j_{sa}}}^{\substack{(n-s+1) \\ (n-s+1)-j_i}} \sum_{\substack{j_i=k+l_{sa}+n-D-j_{sa} \\ j_i=j_{sa}+n-l_{sa}+j_{sa}+l_i-l_{sa}}}$$

$$\sum_{\substack{j_{ik}=j_s+n-k \\ j_{ik}=j_{sa}+n-k \\ j_{ik}=j_{sa}+n-l_{sa}+l_i-l_{sa}}} \sum_{\substack{(j^{sa}-j_{sa})+j_{ik}-j_{sa} \\ (j^{sa}-j_{sa})+j_{ik}-j_{sa} \\ (j^{sa}-j_{sa})+j_{ik}-j_{sa}+l_i-l_{sa}}}$$

$$\sum_{\substack{n=n+\mathbb{k} \\ n=n+\mathbb{k}_1 \\ n=n+\mathbb{k}_2}}^n \sum_{\substack{(n_{is}=n+\mathbb{k}_1-j_s+1) \\ (n_{is}=n+\mathbb{k}_2-j_s+1)}} \sum_{\substack{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_2 \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_3}}$$

$$\sum_{\substack{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_3}} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_2 \\ n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_1}}$$

$$\frac{(n_i + j_{sa} + j_{sa}^{ik} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D > \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_i)}^{\left(\right)} \\
&\quad \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+l_{sa}-l_i)}^{(j_i+j_{sa}-s)} \sum_{j_i=n-D}^n \\
&\quad \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{ik}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
&\quad \sum_{(n_{ik}-n_{is}-j^{sa}-j_{sa})}^{(n_{ik}-n_{is}-j^{sa}-j_{sa})} \sum_{n_s=n-j_i+1}^{n-j_i-\mathbb{k}_3} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - l_s)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{is} - 1)!}{(j_{ik} - l_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - l_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
&\quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\quad \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
&\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{\binom{n}{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{n}{l}} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{n}{l}} \sum_{j_i=l_i+n-D}^n \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1 \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\dots)}^{\binom{n}{l}} n_s=n_{sa}+j^{sa}-j_i \\
 & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \dots - \mathbb{k}_2 - \dots - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \dots - \mathbb{k}_s)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - \dots - j_{sa}^{ik})!} \\
 & \frac{(l_s - 2)!}{(\mathbb{k}_s - j_s)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n - 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n - a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = 1 \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge I = \mathbb{k}_s - 0 \wedge$

$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^s, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$

$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$

$\mathbb{k}_s : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{n}{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{n}{l}}$$

$$\begin{aligned}
& \sum_{j_{ik}=\mathbf{l}_s+\mathbf{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{\mathbf{n}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_i-1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j_{sa}-1)! \cdot (n_i+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
& \frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
& \frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\left(\right. \left.\right)} \sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{\mathbf{n}} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(\right. \left.\right)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right. \left.\right)} \sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{\mathbf{n}}
\end{aligned}$$

giuliano

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s \\
 & \quad \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot \\
 & \quad \frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \\
 & \quad \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - i > l_{ik} \wedge l_{sa} - j_{sa} - s > \dots \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^l\}$$

$$s \geq 6 \wedge s = \mathbb{k} \wedge \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^n$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n-D}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{z})!}{(-j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} - l_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\binom{n}{2}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{n}{2}}$$

$$\sum_{\substack{j^{sa}+j_{sa}^{ik}-j_{sa} \\ j_{ik}=\mathbf{l}_{ik}+\mathbf{n}-D}}^{\mathbf{n}} \sum_{\substack{(\mathbf{n}+j_{sa}-s) \\ (j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_i - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - n - \mathbf{n} - 1)!}{(n_s + \mathbf{n} - n - 1)! \cdot (n_s - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + l_s - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{r}{s}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa} - j_{sa}}^{n} \sum_{(j^{sa} = l_i + \mathbf{n} + j_{sa} - D - s)}^{(n + j_{sa} - s)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{\binom{r}{s}} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{\mathbf{n}}{j_s=j_{ik}+l_s-l_{ik}}} \sum_{j_{ik}=l_s-j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}-j_{sa}^i} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_i+j_{sa}-D-s-1)} \sum_{j_i=l_i+\mathbf{n}-D}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\infty} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(\mathbf{l}_i - 1)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{\substack{j_{ik}=l_s \\ j_{sa}^{ik}=D-1}}^{\substack{j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\substack{(n+\mathbb{k})-s \\ (j^{sa}=n+j_{sa}-D-s)}}^{\substack{(n+s)-s}} \sum_{j_i=j^{sa}+s-j_{sa}}^n$$

$$\sum_{\substack{n-\mathbb{k} \\ n_{is}=n+\mathbb{k}-j_s+1}}^{\substack{(n_i-j_s)}} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=1}^{\infty} \sum_{\substack{(j_s=j_{ik}-\mathbf{l}_s-\mathbf{l}_{ik})}} \sum_{\substack{(n+\mathbf{l}_i-s)}} \sum_{\substack{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}} \sum_{\substack{j_i=j^{sa}+s-j_{sa}}} \sum_{\substack{n_i=n+\mathbb{k}_1 \\ n_i=n+\mathbb{k}_2-j_{sa} \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}} \sum_{\substack{(n_i+j_{ik}+j_{sa}-j^{sa}-\mathbf{l}_1-\mathbf{l}_2-\mathbf{l}_3-j_{sa}^{ik})}} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}} \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbf{l}_1 - \mathbf{l}_2 - \mathbf{l}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{l}_1 - \mathbf{l}_2 - \mathbf{l}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\geq \mathbf{n} < n \wedge \mathbf{l}_s > D - j_{sa} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - \mathbf{l}_{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_s)}^{\infty} \\
&\sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(n+j_{sa}-s)} \sum_{j_i=l_i+n-1}^n \\
&\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbb{k}_1+j_{ik}+\mathbb{k}_2+\mathbb{k}_3-n_i-j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1} \\
&\sum_{j^{sa}+1}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_3} \\
&\frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - j_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\frac{(n_{is} - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot \\
&\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
&\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} + \\
&\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_s)}^{\infty}
\end{aligned}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-j_s+1)!}.$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{sa}-j_{sa}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-j_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right.)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right.} \sum_{j_i=j^{sa}+s-j_{sa}}^{\left(\right.)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s}^{\left.\right)} \\ \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (n - j_i - l_i)!}.$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - i > l_{ik} \wedge l_{sa} - j_{sa} - s > \dots \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^l\}$$

$$s \geq 6 \wedge s = \mathbb{k} \wedge \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left.\right)}$$

$$\sum_{j_{ik}=l_s+n+j_{sa}^{ik}-D-1}^{l_t+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(n+j_{sa}-s)} \sum_{j_i=l_i+n-D}^n \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+j_{ik}-\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{-j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{\substack{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s \\ (j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}}^{\mathbf{n}+j_{sa}^{ik}-s} \sum_{\substack{(n+j_{sa}-s) \\ (j_i=j^{sa}+s-j_{sa})}} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_i - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - n - \mathbf{n} - 1)!}{(n_s + \mathbf{n} - n - 1)! \cdot (n_s - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{n} - 2)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + l_s - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\ )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i + \mathbf{n} - D - s)} \sum_{(j_s = l_{ik} + \mathbf{n} - D - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s}^{(n + j_{sa} - s)} \sum_{(j^{sa} = l_{sa} + \mathbf{n} - D)} \sum_{j_i = l_i + \mathbf{n} - D}^n$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}} \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(\mathbf{l}_i - 1)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{\substack{i_{ik} = j_s + l_{ik} - l_s \\ n + \mathbb{k} (n_{is} = n + \mathbb{k} - j_s + 1)}}^{\sum_{i_{ik} = j_s + l_{ik} - l_s} (n_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{\substack{j_i = j^{sa} + s - j_{sa} \\ n_{is} + j_s - j_{ik} - \mathbb{k}_1}}^{\sum_{j_i = j^{sa} + s - j_{sa}} (n_{is} - s)} \sum_{\substack{n \\ n_{is} + j_s - j_{ik} - \mathbb{k}_1}}^n$$

$$\sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}}^{\sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)} (n_{sa} + j^{sa} - j_i - \mathbb{k}_3)} \sum_{\substack{n_s = n - j_i + 1 \\ n_s = n - j_i + 1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=1}^{\min(j_s - l_{i_k} + n_{is}, D - s + 1)} \sum_{j_{ik} = j_s + l_{i_k} - l_{sa} \wedge j^{sa} = j_{ik} + j_{sa} - s}^{n_{ik} = n_{is} + j_s - j_{ik}} \sum_{j_i = j^{sa} + s - j_{sa}}^{n_i = n + \mathbb{k} - j_i}$$

$$\sum_{n_i = n + \mathbb{k} - j_i}^{n_{ik} = n_{is} + j_s - j_{ik}} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{n_{sa} = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\sum_{n_{ik} = n_{ik} + j_{ik} - \mathbb{k}_1 - \mathbb{k}_2}^{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\geq \mathbf{n} < n \wedge \mathbf{l}_s > D - j_i - 1 \wedge$$

$$2 \leq j_i \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=l_{sa}+n-D)}^{\mathbf{(n+j_{sa}-s)}} \sum_{j_i=l_i+n-}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_{ik}-\mathbb{k}_1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{\mathbb{k}_2=j_{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{ik}-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 + 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_i - n_{sa} - 1)!}{(n_{sa} - j_{ik})! \cdots (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-j_{sa}+1}^{n_{is}+j_s-j_i-\mathbb{k}_1}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_s+j^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa})!}.$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - i = l_{ik} \wedge l_{sa} + j_{sa} - s = i \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^i < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^l\}$$

$$s \geq 6 \wedge s = \mathbb{k} \wedge \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = j^{sa} + l_{ik} - l_{sa}}^n \sum_{(j^{sa} = j_i + l_{sa} - l_i)}^{(\ )} \sum_{j_i = l_i + n - D}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{+j_l - l - 1 \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l})!}{-j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l} - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l} - j_{ik} - \mathbf{l}_i)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{\mathbf{n}}{\mathbf{n}}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}} \sum_{(j^{sa}=j_i+\mathbf{l}_{sa}-\mathbf{l}_i)}^{\binom{\mathbf{n}}{\mathbf{n}}} \sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{\mathbf{n}}{\mathbf{n}}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$S_{i,k,s,a,j_s,j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{l}_s+n-D)}$$

$$\sum_{l_{ik}-l_{sa}}^{n+j_{sa}-s} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{\substack{j_{ik} = n + l_{ik} - l_{sa} \\ (j^{sa} = n + j_{sa} - D - s)}}^{\sum_{j_{ik} = n + l_{ik} - l_{sa}}^{\sum_{j_i = j^{sa} + l_i - l_{sa}}^{\sum_{\substack{(n + j_{sa} - s) \\ (n_{ik} - j_{ik} - 1) \\ (n_{is} = n + \mathbb{k} - j_s + 1)}}^{\sum_{\substack{(n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1 \\ (n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3)}}^{\sum_{\substack{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})! \\ (n_i - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}}}}}}}$$

$$\sum_{\substack{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3)}}^{\sum_{\substack{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})! \\ (n_i - j_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}}}$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$> \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j_{sa}, j_i} &= \sum_{k=1}^{n-j_{sa}^{ik}+1} \sum_{(j_s=j_{sa}+n-D)}^{(j_k-j_{sa}^{ik}+1)} \\
 &\quad \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D}^{n+j_{sa}^{ik}-s} \sum_{l_{sa}=l_i+l_{ik}-l_{ik}}^{l_{ik}+l_{sa}-l_{ik}} \sum_{l_i=j_{sa}+l_i-l_{sa}}^{l_i-\mathbb{k}_1} \\
 &\quad \sum_{n_i=n+\mathbb{k}} \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-\mathbb{k}-1)} \sum_{n_{sa}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.
 \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\left(\right)} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-s-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{sa}}^{\left(\right)} \sum_{\mathbb{k}_1}^{\left(\right)} \\ & \sum_{(j_{sa}=n_{ik}+j_{sa}^{ik}-l_{sa}-\mathbb{k}_2)+j_{sa}-s-j_{sa}^{ik}}^{\left(\right)} \sum_{j_i=j_{sa}+l_i-\mathbb{k}_3}^{\left(\right)} \\ & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} - n_{ik} + j_{sa}^{ik} - j^{sa} - s - j_{sa}^{ik})!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}. \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > \mathbf{n} - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{ik} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} - 1 > l_s \wedge l_{sa} - j_{sa}^{ik} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge \mathbb{k} > \mathbb{k} \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i+\mathbf{n}-D-s)} \sum_{(j_s=l_s+\mathbf{n}-D)}^{\left(\right)}$$

$$\begin{aligned}
& \sum_{j_{ik}=\mathbf{l}_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{\mathbf{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)} \sum_{n_s=j_i+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i+n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_i+n^{sa}-n_s-j_i-\mathbb{k}_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
& \frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=1}^{(\mathbf{n}-s+1)} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\mathbf{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

**gündüz**

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_i - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l})!}{(-j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - \mathbf{l})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(\mathbf{n}-s+1)} \sum_{(j_s=\mathbf{l}_t+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$S_{i,k,j,s,a,j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{l}_s+n-D)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_i - j_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{j_{ik} = \mathbf{n} + \mathbf{l}_{ik} - l_{sa}}^{\mathbf{n}} \sum_{(j^{sa} = j_{sa} - l_i)}^{\mathbf{n}} \sum_{j_i = l_{sa} + \mathbf{n} + s - D - j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_{ik} = \mathbf{n} + \mathbf{l}_{ik} - 1}^{(n_i - j_i - 1)} \sum_{n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1}^{(n_i - j_i - 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_i - 1)}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{\mathbf{n}} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{\mathbf{n}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - j_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$> \mathbf{n} \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned} {}_{fz}S_{j_s, j_{ik}, j_{sa}, j_i} &= \sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{sa}+n-D)}^{(l_{ik}-j_{sa}+1)} \\ &\quad \sum_{j_{ik}=j_{sa}+l_i}^{n_i} \sum_{(j_{sa}=l_{sa}+n-s)}^{(l_{sa}-s)} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{(l_{sa}-\mathbb{k}_1)} \\ &\quad \sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{ik}=n+\mathbb{k}-j_s+1)}^{(n_{ik}+1)} \sum_{n_k=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_{ik}-j_{sa}-\mathbb{k}_2)} \\ &\quad \sum_{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1)}^{(n_{sa}-j_{sa}+1)} \sum_{n_s=n-j_i+1}^{n_s} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\ &\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\ &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ &\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\ &\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \end{aligned}$$

gündemi

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\begin{aligned} & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=l_{sa}+n-D)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_i}^{(n_i-j_s+1)} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-\mathbb{k}_1-j_{ik}-\mathbb{k}_1}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-1)} \\ & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-1)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\right)} \\ & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2 - \mathbb{k}_1 - j_{sa})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_1)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - j_{sa})!} \cdot \\ & \frac{(l_s - 2)!}{(\mathbf{n} - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > \mathbf{n} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} - 0 \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$z \cdot z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_i+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)} \\
& \sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

**gündüz**

$$\sum_{\substack{( ) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}^{\sum} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{sa}+\mathbf{n}-D-j_{sa})} \sum_{(j_s=l_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\sum} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(l_s - 1)!}{(l_s - j_{sa} - 1)! \cdot (l_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - l_s - j_{sa} + 1)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{n-s+1} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}$$

$$\sum_{j_i=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{n-s+1} \sum_{l_{sa}=l_{ik}+n-D-j_{sa}^{ik}}^{(n-s+1)-l_{ik}}$$

$$\sum_{j_{ik}=j_s + j_{sa}^{ik}-1}^{n} \sum_{(j_{sa}^{ik}+l_{sa}-l_{ik}) \leq j_{ik} \leq l_i - l_{sa}}^{(j_{sa}^{ik}+l_{sa}-l_{ik})-j_{ik}+1} \sum_{l_i = l_{sa}+n_{ik}-\mathbb{k}_1}^{n_{ik}-j_{ik}+1}$$

$$\sum_{\substack{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2 \\ n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}}^{\substack{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2) \\ (n_s+n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_i + j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D > \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-1)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 &\quad \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{} \sum_{(j^{sa}=j_i+l_{sa}-n, j_{sa}=j_i+n-1)}^{(\text{---}))} \Delta_{j_{ik}-j_{sa}^{ik}} \\
 &\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i-\mathbb{k}_1-\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
 &\quad \Delta_{n_{ik}-j_{sa}^{sa}-\mathbb{k}_2} \Delta_{n_{ik}-j_i-\mathbb{k}_3} \\
 &\quad \Delta_{(n_{ik}-n+\mathbb{k}_3-j_{ik}-1)} \Delta_{n_s=n-j_i+1} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 &\quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} - 
 \end{aligned}$$

gülde

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_{ik}+s+n-D-\mathbb{k}_1}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-\mathbb{k}_1-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2-j_s+1)}^{\left(\right)} \sum_{n_{is}=n_{sa}+j^{sa}-j_i}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2 - \mathbb{k}_1 - j_{sa})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + l_{ik} + l_{sa} - j^{sa} - j_{sa} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + s \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} < l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k}_1 > 0 \wedge$$

$$j_{sa} < j_{sa}^{i-1} - 1 \wedge j_{sa}^{ik} = j_{sa}^{i-1} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{i-1}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \geq i + \mathbb{k} \wedge$$

$$\therefore z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(j_{ik}-j_{sa}^{ik}+1\right)} \sum_{(j_s=l_s+n-D)}^{\left(\right)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\infty} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{is}+j_s-j_i+1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}+1)!} \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_s+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\infty} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty}
\end{aligned}$$

**gündün**

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_l} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + \mathbf{n} - D)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - l_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_s=l_{ik}+\mathbf{n}-D}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& f(z) = \sum_{(l_{ik}+n-D-j_{sa})} \sum_{(l_{sa}+n-D)} \\
& \sum_{i_k=l_{ik}+n-D}^{n+j_{sa}^{ik}} \sum_{(j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{(n_i-j_s)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1} \\
& \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \\
& (n_{sa}=n+\mathbb{k}_3-j^{sa}+1) \quad n_s=n-j_i+1 \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} .
\end{aligned}$$

g i u d i n y a

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(n-s+1)} \sum_{\substack{j_s = l_{ik} + n - D - j_{sa}^{ik} + 1}}^{} \sum_{\substack{n+j_{sa}^{ik}-s \\ j_{ik} = j_s + j_{sa}^{ik} - 1}}^{} \sum_{\substack{( ) \\ (j^{sa} = j_s + l_{sa} - l_{ik} - j_{sa}^{ik} - l_{sa})}}^{} \sum_{\substack{n_i - n + \mathbb{k} \\ (n_{is} - \mathbb{k} - j_s - \mathbb{k}_1 - j_{ik} - \mathbb{k}_2) = n + \mathbb{k} - \mathbb{k}_3 - j_{ik} + 1}}^{} \sum_{\substack{(n_i - j_s + 1) \\ (n_{ik} + j_{sa}^{ik} - s - \mathbb{k}_2) = n_{sa} + j_{sa}^{ik} - j_i - \mathbb{k}_3}}^{} \sum_{\substack{n_{is} + j_s - j_{ik} - \mathbb{k}_1 \\ (n_{sa} + \mathbb{k}_3 - j^{sa})}}^{} \sum_{\substack{n_s = n - j_i + 1 \\ n_s = n - j_i}}^{} \sum_{\substack{(n_i - n_{is} - 1)! \\ (j_s - j_i - 1)! \cdot (n_i - n_{is} - j_s + 1)!}}^{} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+l_i-l_s}^{} \cancel{A}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-\mathbb{k}_2-j_{ik}-\mathbb{k}_1}^{} \cancel{Y}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1-\mathbb{k}_2)}^{} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{} \cancel{Z}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2 - \mathbb{k}_1 - j_{sa})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + l_{ik} + l_{sa} - j^{sa} - j_i - j_{sa})!}.$$

$$\frac{(l_s - 2)!}{(\mathbf{n} - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} \wedge \mathbf{l} \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k}_1 > 0 \wedge$$

$$j_{sa} < j_{sa}^{i-1} - 1 \wedge j_{sa}^{ik} = j_{sa}^{i-1} + 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{i-1}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s > \mathbf{s} + \mathbb{k} \wedge$$

$$\therefore z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+n-D)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=l_i+n-D}^{(j_i+j_{sa}-s)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-n_s-j_i+1}^{n_{sa}+j^{sa}-j_i-1}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_i-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_i+n^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{(\ )}{( )}}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{(\ )}{( )}} \sum_{j_i=l_i+n-D}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa})!}.$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} - j_{sa} - s > 0 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^l\}$$

$$s \geq 6 \wedge s = \mathbb{k} \wedge \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{l_i+n+j_{sa}-D-s-1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^n \sum_{j_i=l_i+\mathbf{n}-D}^n$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_i - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l})!}{(j_s - 2)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_i - j_{sa}^{ik} + 1)!}{(j_s + j_{sa} - j_{ik} - \mathbf{l}_i)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + j_{sa} - \mathbf{l}_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{l}_s+\mathbf{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{\mathbf{n}} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!} \cdot$$

~~$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$~~

~~$$\frac{(n_s + l_i - \mathbf{n} - 1)!}{(n_s + l_i - \mathbf{n} - 1)! \cdot (n_s + l_i - j_i)!} \cdot$$~~

~~$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$~~

~~$$\frac{(l_{ik} - j_{sa} - j_{ik} + 1)!}{(j_s + l_{ik} - l_s - l_{sa})! \cdot (l_{ik} - j_s - j_{sa} + 1)!} \cdot$$~~

~~$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + j_{sa} - l_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$~~

~~$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$~~

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{n} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, \dots, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_s = l_{ik} + n - D}^{l_i + n + j_s - D - s - 1} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{} \sum_{j_i = l_i + n - D}^n$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^{} \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(\mathbf{l}_i - 1)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{\substack{j_{ik} = n + j_{sa}^{ik} - D - s \\ j_{ik} \leq n + j_{sa}^{ik} - D - s}}^{\substack{n + j_{sa}^{ik} - s \\ j_{ik} = n + j_{sa}^{ik} - D - s}} \sum_{\substack{(j^{sa} - j_{ik} + \mathbf{l}_{sa} - \mathbf{l}_{ik}) \\ j_i = j^{sa} + s - j_{sa}}}^{\substack{s \\ j_i = j^{sa} + s - j_{sa}}} \sum_{\substack{n \\ n_{is} + j_s - j_{ik} - \mathbb{k}_1 \\ n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}}^{\substack{n \\ n_{is} + j_s - j_{ik} - \mathbb{k}_1 \\ n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}}$$

$$\sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}}^{\substack{(n_i - j_s) \\ n_{is} = n + \mathbb{k} - j_s + 1}} \sum_{\substack{n_{sa} + j^{sa} - j_i - \mathbb{k}_3 \\ n_s = n - j_i + 1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=1}^{\infty} \sum_{\substack{j_s = j_{ik} - j_{sa}^{ik} + 1}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{\substack{j_{ik} = l_i + n + j_{sa}^{ik} - D \\ j^{sa} = j_{ik} + l_{sa} - s \\ j_i = j^{sa} + s - j_{sa}}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{\substack{n_i = n + \mathbb{k}_1 - j_{ik} + j_{sa} - \mathbb{k}_2 \\ n_{ik} = n_i + j_{sa} - j_{ik} - \mathbb{k}_1}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{\substack{n_{ik} = n_i + j_{sa} - j_{ik} - \mathbb{k}_2 \\ n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{\substack{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})! \\ (n_i - n_{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}}^{\left(\begin{array}{c} \\ \end{array}\right)}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > D - j_s + 1 \wedge \\ 2 \leq j_s \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ j_{ik} + j_{sa} - j^{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ - j_{sa}^{ik} - 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\infty} \sum_{(j_s = l_s + n - D)}^{(l_i + n - D - s)} \\
&\quad \sum_{j_{ik} = l_{ik} + n - D}^{n + j_{sa}^{ik} - s} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{\left(\right)} \sum_{(n_i = l_i + n - D)}^n \\
&\quad \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_i + 1)}^{(n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \\
&\quad \sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{(n_s = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{is} - n_i - \mathbb{k}_1 - 1)!}{(j_s - j_{ik} - 1)! \cdot (n_i + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
&\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
&\quad \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
&\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_t+n-D-s+1)}^{(n-s+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i=j^{sa}+s-i}^n \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i-k_1+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{ik}+j_{ik}-j^{sa}-n_{is}+j^{sa}-j_i-\mathbb{k}_3)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1)}^{(n_{ik}+j_{ik}-n_{is}+j^{sa}-j_i-\mathbb{k}_3)} \sum_{n_s=n-j_i+\mathbb{k}_1+1}^{\left(\begin{array}{c} \\ \end{array}\right)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{ik} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1) \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - l_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_t+n-D-s+1)}^{(n-s+1)}
\end{aligned}$$

**gündem**

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - j_s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - l_{ik} - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{n})! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - l_{ik} \leq j^{sa} + j_{sa}^{ik} - j_i \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa}^{ik} \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - l_{ik} > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = 0 \wedge$$

$$j_s < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{ \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^s, \dots, \mathbb{k}_n, j_{sa} \} \wedge$$

$$\geq 6 \wedge I = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_1 = \mathbb{k}_{-2} + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{l}_s+n-D)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_i+n-D}^{\mathbf{n}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} + n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_j - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - n_s + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{n}{2}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{n}{2}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\binom{n}{2}} \sum_{j_i=l_i+n-D}^{\mathbf{n}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_l} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + \mathbf{n} - D)}$$

$$\sum_{j_{ik} = l_{ik} + \mathbf{n} - D}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = l_t + \mathbf{n} + j_{sa} - D - s)}^{(n + j_{sa} - s)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_{ik})! \cdot (j_{ik} - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - l_s - j_{sa} + 1)!}.$$

$$\frac{(j_s + j_{sa} - l_{ik} - l_s)! \cdot (l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa} - l_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(n+j_{sa}-s)}$$

$$\sum_{i_k=j^{sa}+j_{sa}^{ik}-j_{sa}}^{n+j_{sa}-s} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, \dots, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + \mathbf{n} - D)}$$

$$\sum_{j_{ik} = l_{ik} - D}^{(j_{sa}^{ik} - D) - 1} \sum_{(j^{sa} = l_i + \mathbf{n} + j_{sa} - D - s)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{sa} - j_{sa})!}.$$

$$\frac{(D - n - l_i)! \cdot (n - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{\substack{j_{ik} = l_i + j_{sa}^{ik} - D - s \\ n - j_i + \mathbb{k} \\ (n_{is} = n + \mathbb{k} - j_s + 1)}}^{\substack{n + j_{sa}^{ik} - s \\ n \\ (n_{is} = n + \mathbb{k} - j_s + 1)}} \sum_{\substack{j_i = j^{sa} + l_i - l_{sa} \\ n_{is} + j_s - j_{ik} - \mathbb{k}_1 \\ n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}}^{\substack{(n_i - j_i) \\ n_{is} + j_s - j_{ik} - \mathbb{k}_1 \\ n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}} \sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}}^{\substack{(n_{is} - j_{sa}^{ik} + 1) \\ (n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}} \sum_{\substack{n_{sa} + j^{sa} - j_i - \mathbb{k}_3 \\ n_s = n - j_i + 1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - \mathbf{l}_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{\substack{j_{ik}=l_i+n+j_{sa}^{ik}-s \\ j_{sa}=j_{ik}-j_{sa}^{ik}-j_{sa}}} \sum_{\substack{j_i=j^{sa}+l_i-\mathbf{l}_{sa} \\ j_{ik}=n_{ik}+j_{sa}-j_{ik}-\mathbf{k}_1}} \sum_{\substack{n_{ik}=n_{is}+j_s-j_{ik}-\mathbf{k}_1 \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2}} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i-\mathbf{k}_3 \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbf{k}_1}}$$

$$\sum_{\substack{n_{ik}=n_{is}+j_s-j_{ik}-\mathbf{k}_1 \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2}} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i-\mathbf{k}_3 \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbf{k}_1}} \sum_{\substack{n_{ik}=n_{is}+j_s-j_{ik}-\mathbf{k}_1 \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2}} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i-\mathbf{k}_3 \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbf{k}_1}}$$

$$\frac{(n_i + j_{ik} - j_i - j^{sa} - s - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3 - j_{sa}^{ik})!}{(\mathbf{n} - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \leq \mathbf{n} < n \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbf{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-1)}^{(l_i+n-D-s)} \\
 &\quad \sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=l_t+n+j_{sa})}^{(n+j_{sa}-s)} \sum_{i_t=j^{sa}-j_{ik}+1}^{i_t=j^{sa}-l_{sa}} \\
 &\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{ik}-\mathbb{k}_2-\mathbb{k}_3+j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
 &\quad \sum_{(n_{ik}-n_{is}-j^{sa}-1)}^{(n_{ik}-n_{is}-j^{sa}-1)} \sum_{n_s=n-j_i+1}^{n_{is}-j_i-\mathbb{k}_3} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{is} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 &\quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_t+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}-1}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_s}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa}+j_{sa}-j_{sa}^{ik})!}{(n_{sa}=n+\mathbb{k}_3-j_s-1)!} \cdot \frac{n_s=n-j_i+\mathbb{k}_1}{n_s-j_i+\mathbb{k}_1-1}.$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(n-s+1)} \sum_{(j_s=l_t+n-D-s+1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\infty} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\infty} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\infty} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}^{\infty} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\
 & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_i)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + j_s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}
 \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - s - 1 > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{E}[Z] = 0 \wedge$$

$$j_s < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{s_1, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \dots, s_n, \dots, \mathbb{k}_n, j_{sa}^s\} \wedge$$

$$\geq 6 \wedge \mathbb{E}[Z] = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_1 = \mathbb{k}_2 = \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{l}_s+n-D)}^n$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\infty} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{\infty}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{sa} + n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{n}{2}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{n}{2}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+\mathbf{l}_{sa}-\mathbf{l}_i)}^{\binom{n}{2}} \sum_{j_i=\mathbf{l}_{sa}+\mathbf{n}+s-D-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{\substack{( ) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}^{\sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}} \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_l} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + \mathbf{n} - D)}$$

$$\sum_{j_{ik} = l_{ik} + \mathbf{n} - D}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = l_{sa} + \mathbf{n} - D)}^{(\mathbf{n} + j_{sa} - s)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(j_s + j_{sa} - l_{ik} - l_{sa} + 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{ik} + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + l_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{n} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{( )}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, \dots, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_s + n - D)}$$

$$\sum_{j_{ik} = l_k + n - D}^{n + j_{sa}^{ik}} \sum_{(j^{sa} = l_{sa} + n - D)}^{j_{sa} - 1} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{n + j_{sa} - s}$$

$$\sum_{n_i = n + \mathbb{k}}^{n_i - j_s + 1} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{n_i - j_s + 1} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{ik} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{sa} - j_{sa})!}.$$

$$\frac{(D - n - l_i)! \cdot (n - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{\substack{j_{ik}=l_{sa}+j_{sa}^{ik}-D-j_{sa} \\ n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+1}}^{\sum_{n_{ik}=\mathbf{n}+\mathbb{k}}^{n+j_{sa}^{ik}-s}} \sum_{\substack{(j^{sa}=l_{sa}+j_{sa}-j_{sa}^{ik}) \\ n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+1}}^{\sum_{n_{ik}=\mathbf{n}+\mathbb{k}}^{(n+j_{sa}^{ik}-s)}} \sum_{\substack{j_i=j^{sa}+l_i-l_{sa} \\ n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}}^{\sum_{n_{ik}=\mathbf{n}+\mathbb{k}_1}^{(n_i-j_i)}} \sum_{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ n_{ik}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1}}^{\sum_{n_{ik}=\mathbf{n}+\mathbb{k}_1}^{(n_i-j_i)}} \\$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\sum_{n_{ik}=\mathbf{n}+\mathbb{k}_1}^{(n_i-j_i)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{s=1}^{\infty} \sum_{\substack{j_s = j_{ik} - j_{sa}^{ik} + \\ n + j_{sa}^{ik} - s}} \sum_{\substack{j_i = j^{sa} + \mathbf{l}_i - \mathbf{l}_{sa} \\ n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}}$$

$$\sum_{n_{is} = 1}^n \sum_{\substack{(n_{is} = n + j_s + 1) \\ n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} - j_i - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(\mathbf{n} - \mathbf{l}_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \leq \mathbf{n} < \mathbf{l}_s \wedge \mathbf{l}_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \\
& \sum_{j_{ik}=l_{ik}+n-D}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=l_{sa}+n-D)}^{(n+j_{sa}-s)} \sum_{i_i=j^{sa}+j_i-l_{sa}}^{(l_{sa}+n-D-j_{sa})} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{ik}+n_{is}+j_{ik}-\mathbb{k}_2-\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
& \sum_{(n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)}^{(n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)} \sum_{n_s=n-j_i+1}^{(n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - j_{is} - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_{is} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{n-s+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(n-s+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}-1}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \frac{(n_{ik}+j_{ik}-j^{sa}-n_{is}-j_i+\mathbb{k}_3)!}{(n_{sa}=n+\mathbb{k}_3-j_s-1)!} \cdot \frac{n_s=n-j_i+\mathbb{k}_3}{(n_{ik}+j_{ik}-n_{is}-j_i+\mathbb{k}_3)!} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \cdot \\
& \frac{(n_s-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{n-s+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(n-s+1)}
\end{aligned}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - j_{ik}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_i)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_i - j_{sa} \leq \mathbf{n} \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - 1 = \mathbf{l}_{ik} \wedge \mathbf{l}_i \wedge j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{I} = 0 \wedge$$

$$j_s < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{ \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \dots, \mathbb{k}_{s-1}, \mathbf{d} \} \wedge$$

$$s \geq 6 \wedge s < s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_1 = \mathbb{k}_2 = \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{l_{sa}+j_{sa}-s} \sum_{j_i=s+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_j - j^{sa} - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - n_s + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} - \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{(l_{sa})} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{sa})} \sum_{j_i=l_{sa}+j_{sa}-s+1}^{l_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - n - \mathbf{n} - 1)!}{(n_s + j_i - n - \mathbf{n} - 1)! \cdot (j_i - 1)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_i - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i + j_i - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{r}{2}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{r}{2}}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{r}{2}} \sum_{j_i=s+1}^{l_{sa}+j_{sa}-s}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{r}{2}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^n$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$S_{j_s, j_{ik}, j_{sa}, l_i} = \sum_{k=1}^{(j_{sa}-s)} \sum_{i=s+1}^{l_{ik} + j_{sa}^{ik} - s} \sum_{n_{ik}=j^{sa}+l_{ik}-j_{sa}}^{(j_{sa}-s+1)} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\lfloor \frac{j_s}{l_s} \rfloor} \sum_{(j_s=j_{sa}+l_s-l_{ik})}^{(\lfloor \frac{j_s}{l_s} \rfloor)} \\ \sum_{j_{ik}=j^{sa}+l_{ik}-1}^{(\mathbf{l}_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j^{sa}=j_{sa}+j_{ik}-s+1)}^{(\mathbf{l}_{ik}+j_{sa}^{ik}-s+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^{\mathbf{n}} \sum_{(n_i=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i=\mathbf{n}+\mathbb{k}-j_{ik}+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}-\mathbb{k}_1)}$$

$$\sum_{(n_{sa}=n_{ik}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j^{sa}-\mathbb{k}_3)} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\begin{aligned}
 & \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\infty} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-s} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1 \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-s)}^{\infty} n_s=n_{sa}+j^{sa}-j_i \\
 & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - l_s - j_{sa})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_{ik} + j_{sa} - j^{sa} - s - j_{sa})!} \cdot \\
 & \frac{(l_s - 2)!}{(\mathbb{k}_1 - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq n + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n - j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = 1 \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k}_1 = 0 \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}^s, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_{sa}+1)}^{\infty} \sum_{j_i=s+1}^{l_s+s-1} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-}^{n_{sa}+j^{sa}-j_i-} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (\mathbf{n}+\mathbb{k}_1+j_s-n_i-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{is}-n_{sa}-\mathbb{k}_3-1)!}{(j^{sa}-j_{ik}-1)! \cdot (\mathbf{n}+\mathbb{k}_1+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (\mathbf{n}+\mathbb{k}_1+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=1}^{\left(\frac{\mathbf{n}}{\mathbb{k}}\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\frac{\mathbf{n}}{\mathbb{k}}\right)} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-1)} \sum_{(j^{sa}=j_{sa}+1)}^{l_i} \sum_{j_i=l_s+s}^{l_i} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{-j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{ik} - l_{sa} - s)!}{(j^{sa} - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right.\left.\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right.\left.\right)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right.\left.\right)} \sum_{j_i=s+1}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.\left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left(\right.\left.\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\varsigma_{i_{ik}, l_{ik}, j_{sa}, j_i} = \sum_{k=1}^{\binom{\phantom{x}}{\phantom{x}}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_{sa}+1)}^{(l_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{l}_s - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{\substack{j_{ik} = j^{sa} + l_{ik} \\ j_{ik} = j_{sa} + l_{ik}}}^{\left(\begin{array}{c} l_{sa} \\ j_{sa} \end{array}\right)} \sum_{j_i = j^{sa} + s - j_{sa}}^{(l_s - l_{ik})}$$

$$\sum_{\substack{j_i = n + \mathbb{k}_1 \\ j_i = n + \mathbb{k}_2 \\ j_i = n + \mathbb{k}_3}}^{\left(\begin{array}{c} n_i - j_i - 1 \\ n_i - j_i - 1 \end{array}\right)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i + j_i + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}$$

$$\sum_{\substack{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3)}}^{\left(\begin{array}{c} n_i + j_i + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik} \\ n_i + j_i + j_{sa} - j^{sa} - s - j_{sa}^{ik} \end{array}\right)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i + j_i + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\infty} \sum_{(j_s, j_{ik}, l_s, l_{ik})} \binom{\cdot}{\cdot} \\
&\quad \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j^{ik}-s)} \binom{(l_{ik}+j^{ik}-s)}{j_{ik}-(j^{sa}+l_{sa}+1)} \binom{j_i=j^{sa}+l_{sa}+1}{j_{ik}} \\
&\quad \sum_{n_l=n}^{n_{is}} \binom{n_{is}+1}{(n_{is}=n+l_{ik}-1)+1} \binom{n_{ik}-1}{n_{ik}-l_{ik}-1} \binom{n_s-j_{ik}-\mathbb{k}_1}{j_{ik}+1} \\
&\quad \sum_{(n_{sa}=n-\mathbb{k}_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \binom{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}{n_s=n-j_i+1} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(2)!(n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} + j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
&\quad \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
&\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - 
\end{aligned}$$

g i u l d i n g

A Y A

$$\begin{aligned}
 & \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_{sa}+1)}^{\infty} \sum_{j_i=j^{sa}+s-i}^{\infty} \\
 & \sum_{n_i=n+\mathbb{k}}^{\infty} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\infty} \sum_{n_{ik}=n_{is}-\mathbb{k}_1-j_{ik}-\mathbb{k}_1}^{\infty} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty} \\
 & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2 - \mathbb{k}_2 - j_{sa})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_2)! \cdot (n + j_{sa} + j^{sa} - s + \mathbb{k}_2 - \mathbb{k}_2 - j_{sa})!} \cdot \\
 & \frac{(l_s - 2)!}{(\mathbb{k}_2 - j_s) \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i) \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq n + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = n \wedge l_{sa} + j_{sa}^{ik} - j_{sa} < l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s < s + \mathbb{k} \wedge$$

$$\therefore z = ? \quad \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

**g**ülden

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{\infty} \sum_{(j^{sa}=j_{sa}+1)}^{(\mathbf{l}_s+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{l}_i} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \quad \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-n_s-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \quad \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
& \quad \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (\mathbf{n}+\mathbb{k}-j_s-n_{is}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (\mathbf{n}+\mathbf{l}_i+j^{sa}-n_{sa}-j^{sa})!} \cdot \\
& \quad \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-n_{isa}-1)! \cdot (\mathbf{n}+\mathbf{l}_i+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \\
& \quad \frac{(n_s-1)!}{(\mathbf{n}_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \quad \frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \quad \frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \quad \frac{(\mathbf{D}-\mathbf{l}_i)!}{(\mathbf{D}+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \quad \sum_{k=1}^{\left(\mathbf{l}_s\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\left(\mathbf{l}_s\right)} \\
& \quad \sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{\infty} \sum_{(j^{sa}=j_{sa}+1)}^{(\mathbf{l}_s+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{l}_i} \\
& \quad \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty}
\end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-k_3}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - k_1 - k_2 - k_3 - j_{sa}^{ik})!}{(n_i - n - k_1 - k_2 - k_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

g i u l u

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)} \sum_{l_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - n_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\lfloor \frac{D}{l_i} \rfloor} \sum_{\substack{( ) \\ (j_s=j_{ik}+l_s-l_{ik})}}^{\lfloor \frac{D}{l_i} \rfloor}$$

$$\sum_{i=k+1}^{\lfloor \frac{D}{l_i} \rfloor} \sum_{\substack{( ) \\ (j^{sa}=j_{ik}+l_{sa}-l_{ik})}}^{\lfloor \frac{D}{l_i} \rfloor} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+\mathbb{k}-j_s+1)}}^n \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{\substack{( ) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}^{\lfloor \frac{D}{l_i} \rfloor} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\lfloor \frac{D}{l_i} \rfloor}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge k = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& f(z) = \sum_{j_{ik}=j_{sa}^{ik}+1}^{\infty} \sum_{j_{sa}=j_{sa}^{ik}+l_{sa}-l_{ik}}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^{\infty} \\
& \quad \sum_{n_{is}=n+k-j_s+1}^{\infty} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\infty} \sum_{n_s=n-j_i+1}^{\infty} \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.
\end{aligned}$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\mathbf{l}_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right. \left.\right)} \\ \sum_{j_{ik}=j_{sa}^{ik}+1}^{\mathbf{l}_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa})}^{\left(\right. \left.\right)} \sum_{(j_i=j^{sa}-j_{sa})}^{\left(\right. \left.\right)} \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{\left(\right. \left.\right)} \sum_{(n_{ik}-j_s-j_{ik}-\mathbb{k}_1)}^{\left(\right. \left.\right)} \\ \sum_{(n_{sa}=n_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right. \left.\right)} \sum_{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{\left(\right. \left.\right)} \\ \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - j_{sa}^{ik} - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_i + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge \mathbf{l}_i = 2 + s - \mathbf{l}_s \wedge \\ 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ l_{ik} - \mathbb{k}_1 + 1 = \mathbf{l}_s \wedge j_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge \\ D \geq \mathbf{n} < n \wedge J = \mathbb{k} > 0 \wedge \\ j_{sa}^{ik} < j_{sa}^{i-1} \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\ \mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{l}{2}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\binom{l}{2}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i-k_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$(n_{ik}+j_{ik}-j^{sa}-n_{sa}+j^{sa}-j_i-\mathbb{k}_3) \\ (n_{sa}=n+\mathbb{k}_3-j_{sa}-1) \quad n_s=n-j_i+\mathbb{k}_3$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{l}{2}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\binom{l}{2}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{( )}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 1)!}{(\ell_s - 1)! \cdot (s - 2)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge \ell_s \wedge j_{sa} - s > 0 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: (j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^l)$$

$$s \geq 6 \wedge s = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{sa}-j_{sa}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{( )} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_i - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(j_s - 2)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=2)}^{(l_{sa}-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{} \sum_{( )}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_l-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{} \sum_{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{} \sum_{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$S_{\mathbf{l}_s, \mathbf{l}_{sa}, \mathbf{l}_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(\mathbf{l}_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{n_k=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{l}_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{l}_i - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{i_k=1}^{l_{ik}-j_{sa}^ik+1} \sum_{i_s=2}^{l_{ik}-j_{sa}^ik+1}$$

$$\sum_{i_k=j_s+l_{ik}-l_s}^{i_k=j_s+l_{ik}-l_s} \sum_{i_s=j_{ik}+l_{sa}-l_k}^{i_s=j_{ik}+l_{sa}-l_k} \sum_{j_i=j^{sa}+s-j_{sa}}^{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{i_k=n+\mathbb{k} (n_{is}=n+\mathbb{k}-j_s+1)}^{i_k=n+\mathbb{k} (n_{is}=n+\mathbb{k}-j_s+1)} \sum_{i_s=n_{ik}+j_s-j_{ik}-\mathbb{k}_1}^{i_s=n_{ik}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + i_s + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i + i_s + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$n \geq \mathbf{n} < \mathbf{m} \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - \mathbf{n} < l_i \leq D + l_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{l=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)} \\
 & \sum_{j_{ik}=i^*+n-\mathbb{l}_{sa}}^{\left(j_i+j_{sa}-s\right)} \sum_{(j^{sa}=j_s+1)}^{\left(j_{sa}\right)} \sum_{j_i=l_i+n-D}^{\left(\right)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}+1)}^{\left(n_{ik}+j_{sa}-\mathbb{k}_1\right)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\left(\right)} \\
 & \sum_{(n_{ik}=n_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(n_{sa}+j^{sa}-j_i-\mathbb{k}_3\right)} \sum_{n_s=n-j_i+1}^{\left(\right)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

gündi

A

$$\begin{aligned}
& \sum_{k=1}^{\binom{n}{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{l_{sa}}{l}} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_{sa}+1)}^{\binom{l_{sa}}{l}} \sum_{j_i=l_{sa}+s-j_{sa}+1}^n \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\binom{n_i-j_s+1}{l}} \sum_{n_{ik}=n+\mathbb{k}_2-j_3-j_{ik}+1}^{n_i+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j_1+1)}^{\infty} \sum_{n_s=n-j_l}^{\infty} \\
& \frac{(n_i - n_s - 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_s - \mathbb{k}_3 - 1)!}{(j_i - n_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \sum_{k=1}^{\binom{n}{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{l_{sa}}{l}} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{l_{sa}}{l}} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{sa}+s-j_{sa}}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa})!}.$$

$$\frac{(l_s - 1)!}{(l_s - 1) \cdot (l_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - i = l_{ik} \wedge l_{sa} \wedge j_{sa} - s > 0 \wedge$$

$$D + s - \mathbf{n} < l_i \leq D + l_s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^{i-1} < j_{sa} - 1 \wedge$$

$$s \in \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{l_{ik}+s-j_{sa}^{ik}} \sum_{j_i=l_i+n-D}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_i - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\left(\right.\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j^{sa}=j_{sa}+1)}^n \sum_{j_i=l_{ik}+s-j_{sa}^{ik}+1}^n$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s) \cdot (l_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right.\left.\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right.\left.\right)}$$

$$\sum_{i=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_l+j_{sa}-s)}^{\left(\right.\left.\right)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.\left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left(\right.\left.\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa}^{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& S_{j_s, j_{ik}, j_{sa}, l_i} = \sum_{k=1}^{n_i} \sum_{(j_{sa}=j_{sa}+1)} \sum_{j_i=l_i+n-D}^{(j_i-s)} \sum_{l_s=s-1}^{l_s+s-1} \\
& \sum_{i_k=j_{sa}+l_{ik}-1}^{n} \sum_{(j_{sa}=j_{sa}+1)} \sum_{n_i=n-k-j_s+1}^{n_i+k} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j_{sa}+1)}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.
\end{aligned}$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\binom{n}{l_s}} \sum_{\substack{(j_s=j_{sa}+l_s-l_{ik}) \\ (j_{ik}=j^{sa}+l_{ik}-l_{sa})}} \Delta^{n-k}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{\substack{(l_s+j_{sa}-j_i-j_{ik}) \\ (j_i=l_s+j_{sa}-j_{ik})}} \Delta^{n-k}$$

$$\sum_{\substack{n_i=n+\mathbb{k}_1 \\ (n_i=j_{sa}+l_{ik}-l_{sa})}} \sum_{\substack{n_{is}=n+\mathbb{k}_2 \\ (n_{is}=j_i+l_{ik}-\mathbb{k}_1)}} \Delta^{n-k}$$

$$\sum_{\substack{n_{ik}=n+\mathbb{k}_3 \\ (n_{ik}=j_{ik}-j^{sa}-\mathbb{k}_1)}} \sum_{\substack{n_{sa}=n+\mathbb{k}_4 \\ (n_{sa}=j^{sa}+l_{ik}-l_{sa})}} \Delta^{n-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\begin{aligned}
 & \sum_{k=1}^{\binom{n}{l_i}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{l_s+s-1}{l_i+n-D}} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\binom{n_i-j_s+1}{n_i=n+\mathbb{k}-j_s+1}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{l_s}{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-s)}^{\binom{(n_i-j_s+1)}{n_s=n_{sa}+j^{sa}-j_{sa}-s}} \\
 & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_2 - l_i - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - l_i - \mathbb{k}_2)! \cdot (n - n_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \\
 & \cdot \frac{(l_s - 2)!}{(n - j_s)! \cdot (j_s - 2)!} \\
 & \cdot \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} \\
 \\
 & D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge \\
 & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge \\
 & l_{ik} - j_{sa}^{ik} + 1 > 1 \wedge l_{sa} - j_{sa}^{ik} - l_{ik} > l_i + j_{sa} - s > l_{sa} \wedge \\
 & D - n < l_i \leq D - l_s + s - 1 \wedge \\
 & n \geq n < \mathbb{k} \wedge I = \mathbb{k} > 0 \wedge \\
 & j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\
 & s: \{j_{sa}, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge \\
 & s \geq 6 \wedge s < s + \mathbb{k} \wedge \\
 & \mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow
 \end{aligned}$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{n}{l_i}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{l_s+s-1}{l_i+n-D}}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_{sa}+1)}^{(l_i+\mathbf{n}+j_{sa}-D-s-1)} \sum_{j_i=l_i+\mathbf{n}-D}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{si}=j_i+1}^{n_{sa}+j^{sa}-j_i-1}$$

$$\frac{(n_i-\mathbf{n}-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (\mathbf{n}+\mathbb{k}_2+j_s-n_i-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{is}-1)! \cdot (\mathbf{n}+\mathbb{k}_3+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-n_{isa}-1)! \cdot (\mathbf{n}+\mathbb{k}_2+j^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=1}^{\left(\right. \left. \right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-l_{ik})}^{(\left. \right)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(\mathbf{l}_{sa})} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{(\mathbf{l}_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(j_s - 2)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{ik} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{\binom{l_{sa}}{( )}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{\binom{n_i-j_s+1}{( )}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} \bullet 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{\mathbf{n}}{\mathbf{l}_s}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{n} \sum_{(j^{sa}=j_{sa}+1)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n-D}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-j_{sa}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \atop (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(\mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (j_i)!} +$$

$$\sum_{\substack{j_{ik} = s + l_{ik} - l_{sa} \\ (l_{ik} + j_{sa} - j^{sa})}} \sum_{\substack{(l_{ik} + j_{sa} - j^{sa}) \\ (j^{sa} = n + j_{sa} - D - s)}} \sum_{\substack{n \\ j_i = j^{sa} + s - j_{sa}}} \sum_{\substack{(l_{ik}) \\ (j_{ik} = n + \mathbb{k}_3 - j^{sa} + 1)}}$$

$$\sum_{\substack{n + \mathbb{k} \\ (n_{is} = n + \mathbb{k} - j_s + 1)}} \sum_{\substack{(n_{is} + j_{sa} - j^{sa}) \\ (n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}} \sum_{\substack{n \\ n_{is} + j_s - j_{ik} - \mathbb{k}_1}} \sum_{\substack{n_{is} + j_{sa} - j_i - \mathbb{k}_3 \\ n_s = n - j_i + 1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{sa})}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D)}^{\infty} \sum_{(j^{sa}=j_{sa}-j_{ik})}^{\infty}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_i-j_s+1)}^{\infty} \sum_{(n_{ik}-j_s-j_{ik}-\mathbb{k}_1)}^{\infty}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{(n_{sa}=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{\infty}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa})!}{(n_i - j_i - \mathbf{n} - \mathbf{l}_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 1) \cdot (\mathbf{n} + j_{sa} + j_{sa} - j^{sa} - s - j_{sa})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_s = \mathbf{n} - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s - j_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} - \mathbf{l}_i \leq D + l_s + s - \mathbf{n} - 1 \wedge$$

$$- \mathbf{n} + \mathbf{l}_i \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\binom{n}{2}} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
&\quad \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\binom{l_i+n+j_{sa}-D-s-1}{n}} \sum_{(j^{sa}=j_{sa}+1)}^{\binom{n}{2}} \sum_{j_i=l_i+n-1}^n \\
&\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\binom{n_i-j_s+1}{n}} \sum_{n_{is}+j_{ik}-\mathbb{k}_1}^{\binom{n_{is}+j_{ik}-\mathbb{k}_1}{n}} \\
&\quad \sum_{n_{ik}+j_{ik}-\mathbb{k}_2}^{\binom{n_{ik}+j_{ik}-\mathbb{k}_2}{n}} \sum_{n_{sa}+j_{ik}-\mathbb{k}_3}^{\binom{n_{sa}+j_{ik}-\mathbb{k}_3}{n}} \\
&\quad \frac{(n_i - n_{is})!}{(j_s - 2) \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 + 1)!}{(j_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{is} - n_{sa} - 1)!}{(n_{sa} - j_{ik}) \cdot \dots \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - n - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
&\quad \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
&\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad \sum_{k=1}^{\binom{n}{2}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{l_s+j_{sa}-1}{n}} \sum_{j_i=j^{sa}+s-j_{sa}}^n
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} + n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j^{sa} - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{is} + j_i - n_{is} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} - \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\phantom{j}\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\phantom{j})}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{l_s+j_{sa}-1} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{(j^{sa}-\mathbf{l}_i-\mathbf{n}-\mathbf{l}_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\phantom{j}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(\phantom{j})}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n}$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{\mathbf{n}}{\mathbf{l}_s}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{\binom{\mathbf{n}}{\mathbf{l}_s}}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_i + n + j_{sa}^{ik} - D - s - 1} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{\binom{\mathbf{n}}{\mathbf{l}_s}} \sum_{j_i = l_i + \mathbf{n} - D}^{\mathbf{n}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 1)!}{(l_s - j_s) \cdot (\mathbf{n} - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - \mathbf{n} - s)! \cdot (j_i + j^{sa} - n - j^{sa} - s)!}.$$

$$\frac{(D - l_i - j_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=l_i+j_{sa}-l_{sa}}^{j_{ik}+j_{sa}-l_{sa}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\infty} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{\infty} \sum_{(j_s = j_{ik} + l_{sa} - j_{sa})} \dots$$

$$\sum_{\substack{i_{ik} = l_i + n + j_s \\ i_{ik} = D - s}}^{l_{sa} + j_{sa}^{ik} - j_{sa}} \dots$$

$$\sum_{n=\mathbb{k}}^n \sum_{(n_{is} = n + j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{n_{sa}}$$

$$\sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}^{n_{sa}} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{n_s}$$

$$\frac{(n_i + \dots + j_{sa})^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \dots - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D > \mathbf{n} \wedge \mathbf{n} \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_{sa}-j_{ik}+l_s-l_s)}^{\left(\right)} \\
 &\quad \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{sa}^{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=l_i+n-j_{sa}}^{\left(\right)} \\
 &\quad \sum_{n_i=n}^{n_i} \sum_{(n_{is}=n+i-k_1+1)}^{i_k+1} \sum_{n_{ik}=n_i-n_{is}}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \sum_{j_{ik}+1}^{j_{ik}+j_{ik}-\mathbb{k}_2} \\
 &\quad \sum_{(n_{sa}=n_{is}+\mathbb{k}_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(n_i - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 &\quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

g i u l d i n g

$$\sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i-k_1+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j_i-j_{ik}-\mathbb{k}_3)! \\ (n_{sa}=n+\mathbb{k}_3-j_{sa}+1) \quad n_s=n-j_i+\mathbb{k}_3$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!} \cdot$$

$$\frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa})!}.$$

$$\frac{(l_s - 1)!}{(l_s - 1) \cdot (l_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - l_i - l_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge l_{sa} \wedge j_{sa} - s > 0 \wedge$$

$$D + s - \mathbf{n} < l_i \leq D + l_s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^{i-1} < j_{sa} - 1 \wedge$$

$$s \in \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=l_i+n-D}^{\mathbf{n}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=l_i+n-D}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_i - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(j_s - 2)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\left(\right.\left.\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right.\left.\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right.\left.)\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{\substack{j_{ik}=l_i+\dots+j_{sa}^{ik}-1 \\ j_{sa}=j_{ik}+l_{sa}-l_{ik}}}^{\left(\right.\left.)\right)} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right.\left.)\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\left(\right.\left.)\right)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.\left.)\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left(\right.\left.)\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& f_z S_{j_s, j_{sa}, j^{sa}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \\
& \sum_{n_i=n-k}^{n} \sum_{(j_s=j_{ik}+l_{sa}-l_{ik})}^{(j_s+l_{ik}-l_s)} \sum_{j_i=l_i+n-D}^{n} \\
& \sum_{n_{ik}=n+\mathbb{k}-j_s+1}^{n_{is}} \sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} .
\end{aligned}$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(\mathbf{l}_s - j_{sa} + 1)} \sum_{(j_s = l_t + k - D - s + 1)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s} (j^{sa} = j_{ik} + l_{sa} - 1) \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + \mathbb{k}_1} (n_i = n + \mathbb{k}_1 - j_s) \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}$$

$$(n_i - j_{ik} - j^{sa} - 1) \sum_{n_{sa} = n - \mathbb{k}_3 - j^{sa} + 1} (n_{sa} = n - \mathbb{k}_3 - j^{sa} + 1) \sum_{n_s = n - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\begin{aligned}
 & \sum_{k=1}^{(l_{sa}-j_{sa}+1)} \sum_{(j_s=l_i+n-D-s+1)}^{} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right.} \sum_{j_i=j^{sa}+s-j}^{} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-s)}^{\left(\right.} \sum_{n_s=n_{sa}+j^{sa}-j_{sa}-s}^{} \\
 & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_2 - l_i - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - l_i - \mathbb{k}_2)! \cdot (n - n_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_s - 2)!}{(n - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} \\
 D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge \\
 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq n \wedge \\
 l_{sa} - j_{sa}^{ik} + 1 > 1 \wedge l_{sa} - j_{sa}^{ik} - l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\
 D - n < l_i \leq D - l_s + s - 1 \wedge \\
 n \geq n < \mathbb{k} \wedge I = \mathbb{k} > 0 \wedge \\
 j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\
 s: \{j_{sa}, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge \\
 s \geq 6 \wedge s < s + \mathbb{k} \wedge \\
 \mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow
 \end{aligned}$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{} \quad$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=l_i+n-D}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{is}-j_i+1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{is}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-n_{isa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=1}^{(\mathbf{l}_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\mathbf{l}_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_i - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(j_s - 1)! \cdot (j_s - 2)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_s - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\left(\right)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\left(\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} \bullet 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(\mathbf{l}_i + \mathbf{n} - D - s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=l_i+n-D}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(\mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (j_i)!} +$$

$$\sum_{\substack{j_{ik}=j_s+l_{ik}-l_s \\ j_{ik}=n+\mathbb{k}(n_{is}-\mathbb{k}_1-\mathbb{k}_2-j_s+1)}} \sum_{\substack{j_{ik}=j_{ik}+l_{sa}-l_k \\ j_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}} \sum_{\substack{j_i=j^{sa}+s-j_{sa} \\ n_{is}+j_s-j_{ik}-\mathbb{k}_1}}$$

$$\sum_{\substack{j_{ik}=j_s+l_{ik}-l_s \\ j_{ik}=n+\mathbb{k}(n_{is}-\mathbb{k}_1-\mathbb{k}_2-j_s+1)}} \sum_{\substack{j_{ik}=j_{ik}+l_{sa}-l_k \\ j_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}} \sum_{\substack{j_i=j^{sa}+s-j_{sa} \\ n_{is}+j_s-j_{ik}-\mathbb{k}_1}}$$

$$\sum_{\substack{j_{ik}=j_s+l_{ik}-l_s \\ j_{ik}=n+\mathbb{k}(n_{is}-\mathbb{k}_1-\mathbb{k}_2-j_s+1)}} \sum_{\substack{j_{ik}=j_{ik}+l_{sa}-l_k \\ j_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}} \sum_{\substack{j_i=j^{sa}+s-j_{sa} \\ n_{is}+j_s-j_{ik}-\mathbb{k}_1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s = l_i + \mathbf{n} - D - s + 1)}^{(l_s)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s}^{n_i} \sum_{(j^{sa} = j_{ik} + l_{sa} - 1)}^{(n_i - j_s + 1)} \sum_{(j_i = j^{sa} - j_{sa})}^{(n_i - j_s + 1)}$$

$$\sum_{n_i = n + \mathbb{k}_1}^n \sum_{(l_{ik} = n_i - j_i + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = l_{ik} + j_s - j_{ik} - \mathbb{k}_1)}^{(n_i - j_s + 1)}$$

$$\sum_{(n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)}^{(n_i - j_i + 1)} \sum_{(n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3)}^{(n_i - j_i + 1)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - j_i + 1 - \mathbb{k}_2 - \mathbb{k}_3 - 1)! \cdot (\mathbf{n} + j_i + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i = D + s - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = j_s - j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge l_i = \mathbb{k} > 0 \wedge$$

$$j_s < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{n}{l}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\binom{n}{l}} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i-k_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{j_i=k_1-j_{ik}+1}$$

$$(n_{ik}+j_{ik}-j^{sa}+j_{sa}-j_i-\mathbb{k}_3) \quad (n_{sa}=n+\mathbb{k}_3-j_{sa}-1) \quad n_s=n-j_i+$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{n}{l}} \sum_{j_i=l_{ik}+j_{sa}^{ik}-s+1}^{l_i}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\binom{n}{l}} \sum_{j_i=l_{ik}+j_{sa}^{ik}-s+1}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{sa} + n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_{is} - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{is} + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right.\left.\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\left(\right.\left.\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{} \sum_{(j^{sa}=j_i+\mathbf{l}_{sa}-\mathbf{l}_i)}^{\left(\right.\left.\right)} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right.\left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left(\right.\left.\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{\mathbf{n}}{s}} \sum_{(j_s = j_{ik} + \mathbf{l}_s - \mathbf{l}_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + \mathbf{l}_{sa} - \mathbf{l}_i)}^{\binom{\mathbf{n}}{s}} \sum_{j_i = s + 1}^{l_s + s - 1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} + j_{sa} - j_{ik} - \mathbf{l}_{sa} + l_{sa})!}.$$

$$\frac{(\mathbf{l}_i - l_i)!}{(\mathbf{l}_i - n - \mathbf{n})! \cdot (n - j_i)!}.$$

$$\sum_{i=1}^{\mathbf{l}_s + j_{sa}^{ik}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{n_{sa}+1}^{l_s + j_{sa}^{ik}} \sum_{(j^{sa} = j_i + l_{sa} - l_i)} \sum_{j_i = l_s + s}^{l_i}$$

$$\sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{\mathbf{k}=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j_s}^{\infty} \sum_{(j^{sa}=l_{sa}-l_i)}^{\infty} \sum_{j_i=s+1}^{s-1}$$

$$\sum_{n_i=n+\mathbb{k}_1}^{\infty} \sum_{n_{ik}=n+\mathbb{k}-j_{ik}}^{\infty} n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1$$

$$\sum_{n_{ik}=n_{ik}+j_{ik}-s-\mathbb{k}_1-\mathbb{k}_2}^{\infty} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - j_{ik} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_{ik} \leq j_{ik} + j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}}^{n_{is}+j_{ik}-\mathbb{k}_1} \sum_{+ \mathbb{k}_1 - l_{ik}+1}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{(j_{sa}+1)}^{n_{sa}+j^{sa}-j_{sa}-\mathbb{k}_3} \sum_{=n-j_i+1}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} + j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} + j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=l_{ik}+j_{sa}^{ik}-s+1)}^{(l_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{si}=j_i+1}^{n_{sa}+j^{sa}-j_i-1}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_s+j^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}^{ik}-s)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 1)!}{(l_s - j_s) \cdot (\mathbf{n} - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - \mathbb{k}_2)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\mathbf{n}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}-1} \sum_{(j^{sa}=l_s+j_{sa})}^{(l_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{j_{ik}=n+\mathbb{k} \\ j_{ik}=n+1+j_{sa}^{ik}-j_{sa}}}^{\mathbf{l}_s + j_{sa} - \mathbf{l}_{ik}} \sum_{\substack{j^{sa}=j_{sa}+1 \\ j^{sa}=j_{sa}+1+j_{ik}-j_{sa}}}^{\mathbf{l}_s + j_{sa} - \mathbf{l}_{ik}}$$

$$\sum_{\substack{n=\mathbf{n}+\mathbb{k} \\ n=n+1+j_{sa}^{ik}-j_{sa}}}^{\mathbf{l}_i - j_s + 1} \sum_{\substack{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}}^{\mathbf{l}_i - \mathbf{l}_{sa}}$$

$$\sum_{\substack{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}^{\mathbf{l}_i - j_s + 1} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^{ik} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D > \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_i)}^{\infty} \\
 &\quad \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-l_{ik})}^{(l_{sa})} \sum_{(j_i=j^{sa}-l_i-l_{sa})}^{\infty} \\
 &\quad \sum_{n_i=n+\mathbb{k}}^{\infty} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-\mathbb{k}_2-\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
 &\quad \sum_{(n_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_3-j_i-\mathbb{k}_3)}^{(n_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_3-j_i-\mathbb{k}_3)} \\
 &\quad \sum_{(n_s=n+\mathbb{k}_3-j_i+1)}^{n_s=n-j_i+1} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - l_i - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -
 \end{aligned}$$

$$\sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+l_i-l_{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-\mathbb{k}_1-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-1)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - \mathbf{n} - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(\mathbf{n} - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq \mathbf{n} + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq \mathbf{n} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_i \leq j_i + j_{sa} - s \wedge j_i - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = \mathbf{n} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} - 0 \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$z \cdot z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(l_{sa})}^{(l_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_1)} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-\mathbb{k}_1-1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{sa}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right.} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(l_{sa})}^{\left(\right.} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - l_i) \cdot (l_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{ik}+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{} \sum_{(n_i-j_{sa}^{ik})}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned} & C_{i_{ik}, j_{ik}, j^{sa}, j_{sa}} = \sum_{s=1}^{l_s} \sum_{(j_s=2)} \\ & \sum_{i_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=i_{ik}+j_{sa}-j_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\ & \sum_{\substack{(n_i-j_s-1) \\ (\mathbf{n}+\mathbb{k})}} \sum_{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ (n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}} \\ & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}. \\ & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}. \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}. \\ & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}. \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}. \\ & \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}. \end{aligned}$$

gündin

YAF

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{l_s} \sum_{(j_s=2)}^{(l_s)} \sum_{j_{ik}=j_s+l_{ik}-l_s}^n \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i+j_s-j_{ik}-\mathbf{k}_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbf{k}_2)}^{(n_{sa}+j^{sa}-j_i-\mathbf{k}_3)} \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3 - j_{sa})!}{(n_i - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3 - j_{sa})! \cdot (n + j_i + j_{sa} - j^{sa} - s - j_{sa})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq n - \mathbf{n} - 1 \wedge$$

$$1 \leq j_{sa} \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j^{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} + j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - \mathbf{n} - \mathbf{l}_i \leq D + l_s + s - \mathbf{n} - 1 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\ )} \sum_{j_i=l_i+n-1}^{l_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}-j_i-1}^{n_{is}+j_{ik}-\mathbb{k}_1} \sum_{j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1+1}$$

$$\sum_{i^{sa}+1}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{j_{sa}=n-j_i+1}^{n_{sa}+j^{sa}-j_{sa}-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_i - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_{ik}+s-j_{sa}^{ik}+1}^n \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i+n_s-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_s+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^n \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)} \\
& \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{ik}+s-j_{sa}^{ik}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n
\end{aligned}$$

**giündü**

$$\sum_{\substack{( ) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}^{} \sum_{\substack{( ) \\ (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + s - \mathbf{n} < l_i \leq D + l_s + s - \mathbf{n} - 1$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - \mathbb{k}_1 \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k}: z = 3 \wedge z = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\infty} \sum_{j_i=l_i+\mathbf{n}-D}^{l_s+s-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - n - \mathbf{n} - 1)!}{(n_s + j_s - n - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{l}_i)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\infty} \sum_{j_i=l_s+s}^n$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{K}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{K}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s -$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_t(n - l_i)!) \cdot (n - l_i)!} =$$

$$j_{ik} = j^{sa} + j^{lk}_{sa} - j_s \quad (j^{sa} = j_i + l_i - l_{sa}) \quad j_i = l_i + n - D$$

$$\sum_{n+k} \sum_{(n_s=k-j_s+1)} n_{ik} = n_{is} + j_s - j_{ik} - k_1$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbf{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbf{k}_3}$$

$$\frac{(n_i + \dots + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \dots - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{s=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \\
 &\quad \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{l_i=n+j_{sa}-D}^{(l_{ik}+l_s-j_{sa}^{ik})} \sum_{i_s=j^{sa}+l_i-l_{sa}} \\
 &\quad \sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{ik}+1)+\mathbb{k}-j_s+1}^{(n_i-1)+1} \sum_{i_s=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{(n_{ik}+1)-j^{sa}-\mathbb{k}_2} \\
 &\quad \sum_{(n_{sa}-\mathbb{k}_3-j^{sa}+1)}^{(n_{sa}-\mathbb{k}_3-j^{sa}+1)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

$$\sum_{k=1}^{\lvert \mathbf{l} \rvert} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\mathbf{l}_{ik}} \sum_{(j^{sa}=\mathbf{l}_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_i-k_1+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa})!}{(n_{sa}+j^{sa}-n_{ik}-j_{ik}+1)!} \cdot \frac{(n_{sa}+j^{sa}-n_{ik}-j_{ik}+1)!}{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j_{sa}+1) \quad n_s=\mathbf{n}-j_i+\mathbb{k}_1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!} \cdot$$

$$\frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\lvert \mathbf{l} \rvert} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\lvert \mathbf{l}_{ik} + j_{sa} - j_{sa}^{ik} \rvert} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 1)!}{(l_s - 1) \cdot (l_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - i > l_{ik} \wedge l_{sa} + j_{sa}^{ik} - s = l_s \wedge$$

$$D + s - n < l_i \leq D + l_s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^{i-1} < j_{sa} - 1 \wedge$$

$$s \in \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{i-1}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+j_{sa}^{ik}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_i - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{z})!}{(-j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(-l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\left(\phantom{j}\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=\mathbf{l}_s+j_{sa})}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - \mathbb{k}_2)!}{(j_{ik} + l_{sa} - j^{sa} - \mathbb{k}_2)! \cdot (j_{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j^{sa}+l_i-j_{sa}}^{(n_s+j_{sa}-1)} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - \mathbf{n} < l_i \leq D + l_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned} \epsilon z S_{j_s, j_{ik}, l_i} &= \sum_{k=1} (j_s = j_{ik} + l_s - l_s) \\ l_{ik} + j_{sa}^{ik} - D - s - 1 & \\ i_{ik} = j_{sa}^i & \\ n & \\ n_{is} + \mathbb{k} (n_{is} = n + \mathbb{k} - j_s + 1) & \\ n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1 & \\ n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2 & \\ (n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1) & \\ n_s = \mathbf{n} - j_i + 1 & \\ (n_i - n_{is} - 1)! & \\ (j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)! & \\ (n_{is} - n_{ik} - \mathbb{k}_1 - 1)! & \\ (j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)! & \\ (n_{ik} - n_{sa} - 1)! & \\ (j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})! & \\ (n_{sa} - n_s - \mathbb{k}_3 - 1)! & \\ (j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)! & \\ (n_s - 1)! & \\ (n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)! & \end{aligned}$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=1}^{\mathbf{l}_{ik}} \sum_{\substack{(j_{sa}=j_{ik}+j_{sa}-j_{ik}-l_s-l_s) \\ (j_{sa}=j_{ik}+j_{sa}-j_{ik}-l_s-l_s)}} \frac{(n+k-s)}{(n_{ik}+k-s)} \cdot$$

$$\sum_{n_i=n+\mathbb{k}}^{\mathbf{l}_{ik}} \sum_{\substack{(n_{ik}+k-s) \\ (n_{ik}+k-s+1) \\ \vdots \\ (n_{ik}+k-s-\mathbb{k}_1)}} \sum_{\substack{(n_{ik}+k-s-\mathbb{k}_1) \\ (n_{ik}+k-s-\mathbb{k}_1+1) \\ \vdots \\ (n_{ik}+k-s-\mathbb{k}_3)}} \sum_{\substack{(n_{sa}=n_{ik}+k-s-j^{sa}+1) \\ (n_{sa}=n_{ik}+k-s-j^{sa}+1) \\ \vdots \\ (n_{sa}=n_{ik}+k-s-j^{sa}+1)}} \sum_{\substack{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3) \\ (n_{sa}+j^{sa}-j_i-\mathbb{k}_3+1) \\ \vdots \\ (n_{sa}+j^{sa}-j_i-\mathbb{k}_3+n_s-n_j+1)}} \sum_{\substack{(n_i-n_{is}-1)! \\ (j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}} \cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+l_i-l_{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{(\ )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-1)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - l_{ik} - \mathbb{k}_2 - \mathbb{k}_1 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - l_{ik} - j_{sa})!} \cdot \frac{(l_s - 2)!}{(\mathbf{n} - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^s - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^s - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - s \wedge j_i^{sa} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + \mathbf{n} - n < l_i \leq D - l_s + s - 1 \wedge$$

$$\geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^s - 1 \wedge j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$> 6 \wedge s < s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{l_{ik}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_t+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_t+n+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{is}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_i+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=l_t+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{z})!}{(-j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{\mathbf{n}}{l_i}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{\mathbf{n}}{l_i}}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\binom{\mathbf{n}}{l_i}} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\binom{\mathbf{n}}{l_i}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\binom{\mathbf{n}}{l_i}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{\mathbf{n}}{l_i}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\binom{\mathbf{n}}{l_i}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(\mathbf{l}_i + \mathbf{n} - D - s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s + \mathbf{l}_{ik} - \mathbf{l}_s}^{n} \sum_{(j^{sa}=l_i + \mathbf{n} + j_{sa} - D - s)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa} + \mathbf{l}_i - \mathbf{l}_{sa}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - n_s - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_s - 1)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{i=j_{sa} + l_i - l_{sa}}^{D-s+1}$$

$$\sum_{=j_s + l_{ik} - l_s}^{(n + \mathbb{k}_3 - s)} \sum_{(j^{sa} + l_i - l_{ik} + j_{sa} - j_{sa}^{ik})}^{(n + \mathbb{k}_2 - s)} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_{is} = n + \mathbb{k}_3 - j_s + 1}^{n_i - j_s} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(\mathbf{l}_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s}^{n} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa})}^{(n_i - j_s + 1)}$$

$$\sum_{n_i = n + \mathbb{k}}^{n} \sum_{(n_{ik} = n + \mathbb{k} + 1) \dots (n_{sa} = n_{ik} + j_{sa} - j_{sa} - \mathbb{k}_1)}^{(n_i - j_s + 1)}$$

$$\sum_{(n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2) \dots (n_{sa} + j^{sa} - j_i - \mathbb{k}_3)}^{(n_i - j_s + 1)}$$

$$\frac{(n_i + i_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - j_s + 1 - \mathbb{k}_3)! \cdot (\mathbf{n} + i_{ik} + j_{sa} - j^{sa} - s - j_{sa})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq n - r - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} + j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} - \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D + s - n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$_{fz}S_{j_s, j_{ik}, j^{sa}, j_l} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}$$

$$\begin{aligned} & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{\infty} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_s}^{\infty} \\ & \sum_{n_l=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_{ik}-\mathbb{k}_1}^{n_{is}+j_{ik}-\mathbb{k}_1} \\ & \sum_{\mathbb{k}_2-\mathbb{k}_1-j_{ik}+1}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{n_{sa}+j_{ik}-\mathbb{k}_3}^{n_{sa}+j_{ik}-\mathbb{k}_3} \\ & \frac{(n_i-n_{is})!}{(j_s-z_s) \cdot (n_i-n_{is}-j_s+1)!} \cdot \\ & \frac{(n_{is}-n_{ik}-\mathbb{k}_1+1)!}{(j_i-n_s-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\ & \frac{(n_i-n_{sa}-1)!}{(n_{sa}-j_{ik}) \cdot \dots \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\ & \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-n_s-n_u-u-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \\ & \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\ & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\ & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\ & \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\ & \sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+\mathbf{n}-D-s+1)}^{(l_s)} \end{aligned}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{is}-j_i+1}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}+1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_s+j^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - I \wedge j_{sa}^s < j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k} \cdot z = 3 \wedge z = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - n - \mathbf{n} - 1)!}{(n_s + \mathbf{n} - n - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{n} - l_i)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\infty} \sum_{j_i=l_{ik}+\mathbf{s}-j_{sa}^{ik}+1}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(\mathbf{j}_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}$$

$$\frac{(D+1)!}{(D+j_i-n-l_i)!\cdot\ldots\cdot(i_j-i_i)!} -$$

$$j_{ik} = \sum_{j=1}^{l_{sa}} (j^{sa} - l_{sa}) j_{t=l_{sa}+n+s-D-j_{sa}}$$

$$\sum_{n+k} (n_{is}=n+k-j_s+1) n_{ik}=n_{is}+j_s-j_{ik}-k_1$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - j_{ik} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n - l_s \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{l_s + s - 1} \sum_{(j_s = j_{ik} - \mathbb{k}_1) \wedge (j_{sa} = j_{ik} - \mathbb{k}_2) \wedge (j_i = j_{ik} - \mathbb{k}_3)} \sum_{i_k = i_s + 1}^{j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_{sa}^{ik} - l_i) \wedge (j_i = j_{sa} - \mathbb{k}_3) \wedge (j_{ik} = j_{sa} + j_{sa}^{ik} - l_s)} \sum_{n = n + \mathbb{k}}^{n + \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3} \sum_{(n_{is} = n + \mathbb{k}_1 - j_s + 1) \wedge (n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1)} \sum_{(n_{ik} + j_{ik} = j_{sa} - \mathbb{k}_2) \wedge (n_{sa} + j_{sa} = j_i - \mathbb{k}_3)} \sum_{(n_{sa} = n + \mathbb{k}_3 - j_{sa} + 1) \wedge (n_s = n - j_i + 1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa}^{ik} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

gündemi

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_i+l_{sa})}^{(\ )} \sum_{j_i=l_s+s}^{n}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+l_{ik}-1}^{n_{is}+j_s-\mathbb{k}_1}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa}-\sum_{(n_{sa}=n+\mathbb{k}_3-j_i)}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3})!}{(n_{sa}-n_s-\mathbb{k}_3-j_i+1)-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_i-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j^{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{(\ )}{( )}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\binom{(\ )}{( )}} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - l_i - l_{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_i) \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i) \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - \mathbb{k} \leq l_{ik} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + l_{sa} - s \wedge j^{sa} + j_{sa} - \mathbb{k} \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - \mathbb{k} \leq l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + j_i - \mathbf{n} < l_{sa} \wedge D + l_s + j_{sa} - \mathbb{k} \leq l_i - 1$$

$$D \geq \mathbf{n} < n \wedge \mathbf{n} - \mathbb{k} > 0$$

$$j_{sa} + j_{sa}^i - 1 \wedge j_{sa}^{ik} + j_{sa} - 1 \leq j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_z = s - \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} + n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - j_s - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - n_s + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j_{sa}=\mathbf{l}_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}^{}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_i - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - n - \mathbf{n} - 1)!}{(n_s + \mathbf{n} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{l}_i)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{n} \sum_{(j^{sa} = l_{sa} + \mathbf{n} - D)}^{(l_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{\infty} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{(\ )} \sum_{j_i = j^{sa} + l_i - l_{sa}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& f z^{\sum_{j_s=j_{ik}+l_s-l_{ik}}^{\sum_{(j_s=j_{ik}+l_s-l_{ik})}^{fz^{\sum_{j_{ik}=j_{sa}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}}^{\sum_{j_{sa}=l_{sa}+n-D}^{+j_{sa}-1}}^{\sum_{j_i=j^{sa}+l_i-l_{sa}}^{(n_i-j_s+1)}}^{\sum_{n_{ik}=n+\mathbb{k}}^{n_{is}=n+\mathbb{k}-j_s+1}}^{\sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}}^{\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}}^{\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{n_s=n-j_i+1}}^{\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.
\end{aligned}$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=1}^{\mathbf{l}_s + j_{sa}^{ik} - 1} \sum_{\substack{(j_s = j_{ik} + \mathbf{l}_s - l_{ik}) \\ (j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})}}^{\left( \begin{array}{c} \\ \end{array} \right)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_s + j_{sa}^{ik} - 1} \sum_{\substack{(j^{sa} = l_s + j_{sa}^{ik}) \\ (j_{ik} = j^{sa} + l_i - l_{sa})}}^{\left( \begin{array}{c} \\ \end{array} \right)}$$

$$\sum_{n_i = n + \mathbf{k}_1}^{\mathbf{l}_s + j_{sa}^{ik} - 1} \sum_{\substack{(n_{ik} = n + \mathbf{k}_1 - j_s + \mathbf{l}_s - l_{ik}) \\ (n_{ik} = n + \mathbf{k}_2 - j^{sa} - \mathbf{l}_{ik}) \\ (n_{sa} = n + \mathbf{k}_3 - j^{sa} + 1)}}^{\left( \begin{array}{c} \\ \end{array} \right)}$$

$$\sum_{n_s = n - j_i + 1}^{n_i + \mathbf{k}_3 - j^{sa} - \mathbf{l}_{ik}}^{\left( \begin{array}{c} \\ \end{array} \right)} \sum_{\substack{(n_{sa} = n - j_s - j^{sa} + 1) \\ (n_{sa} = n - j_i - \mathbf{k}_3 + 1)}}^{\left( \begin{array}{c} \\ \end{array} \right)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbf{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbf{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(\right)} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_s+j_{sa}-1)} \sum_{j_i=j^{sa}+l_i-l_{ik}}^{\left(\right)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{\left(\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{M})}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{M} - \mathbb{k}_1 - \mathbb{k}_2 - l_i - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + l_{sa} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_i - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq \mathbf{n} - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_{sa} + j_{sa}^{sa} - j_{sa}^{ik} \geq l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + \mathbf{n} - \mathbf{n} < l_{sa} \leq \mathbf{n} + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$j_{sa} \geq \mathbf{n} \leq j^{sa} \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^{sa} - 1 \wedge j_{sa} < j_{sa}^{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{sa}, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$> 6 \wedge s = \mathbf{s} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{is}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j_{sa}-1)! \cdot (n_i+j^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=1}^{\left(\right.} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left.\right)}$$

$$\sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{z})!}{(-j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{\mathbf{n}}{l_i}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{\mathbf{n}}{l_i}}$$

$$\sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\binom{\mathbf{n}}{l_i}} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\binom{\mathbf{n}}{l_i}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{\mathbf{n}}{l_i}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\binom{\mathbf{n}}{l_i}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} \bullet 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+1} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{j_{sa}-D-j_{sa}-1} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}^{(n+j_{sa}-s)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - n_s - j_{sa})!}.$$

$$\frac{(\mathbf{l}_s - 1)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{\substack{j_{ik}=l_{sa}+j_{sa}^{ik}-D-j_{sa} \\ j_{ik} \geq n+\mathbb{k}}}^{\mathbf{l}_s+j_{sa}^{ik}-1} \sum_{\substack{(n+j_{sa}-s) \\ j_{sa}+j_{sa}^{ik}-j_{ik} \geq n+\mathbb{k}}}^{\mathbf{n}+\mathbb{k}-s} \sum_{\substack{j_i=j^{sa}+l_i-l_{sa} \\ j_i \geq n-\mathbb{k}_1}}^{\mathbf{n}_is+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{\substack{n_s=\mathbf{n}-j_i+1 \\ n_s \geq n-\mathbb{k}_3}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{D}{l_i}} \sum_{\substack{j_s = j_{ik} + l_s - l_{ik}}}^{\binom{D}{l_s}} \sum_{\substack{j_{ik} = l_{sa} + n + j_{sa}^{ik} - D - j_{sa}}}^{l_s + j_{sa}^{ik} - 1} \sum_{\substack{(j^{sa} = j_{ik} + j_{sa} - j_{sa}) \\ (n_i = n + \mathbb{k} (n_{ik} + \mathbb{k} + \mathbb{k}_1) + \dots + n_{ik} + \mathbb{k}_1)}}^{\binom{D}{n_i - j_s + 1}} \sum_{\substack{(n_{ik} = n_{ik} + \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3) \\ (n_{sa} = n_{ik} + \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3)}}^{\binom{D}{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}} \\ \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa})!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - s - \mathbf{n} + j_{sa} + j^{sa} - s - j_{sa})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq n - r - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} + j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - 1 \leq \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D + j_{sa} - 1 \leq \mathbf{l}_{sa} \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n+j_{sa}-s)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_s}$$

$$\sum_{n_l=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_{ik}-\mathbb{k}_1}^{n_{is}+j_{ik}-\mathbb{k}_2} \sum_{j_{ik}+1}^{j_{ik}+1}$$

$$\sum_{\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{ik}-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 + 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_i - n_{sa} - 1)!}{(n_{sa} - j_{ik}) \cdots (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-j_{sa}+1}^{n_{is}-j_i+1}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_s+j^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_{sa}+\mathbf{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - \mathbb{k}_1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k}_1 \wedge$$

$$\mathbb{k}_1 \cdot z = 3 \wedge z = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{sa}+\mathbf{n}-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{n} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - n - \mathbf{n} - 1)!}{(n_s + \mathbf{n} - \mathbf{n} - 1) \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{n} - l_i)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s = l_{sa} + \mathbf{n} - D - j_{sa} + 1)}^{(l_s)}$$

$$\sum_{j_{ik} = j_s + l_{ik} - l_s}^{n} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(n + j_{sa} - s)} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{n + j_{sa} - s}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{sa} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(\mathbf{l}_s - 1)!} \sum_{l_{sa}=n_{sa}+j_{sa}-\mathbf{l}_s+1}^{(\mathbf{l}_s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}$$

$$\sum_{l_{ik}=j_s+l_{ik}-l_s}^{l_{ik}} \sum_{(j^{sa}+j_{sa}-j_{ik}-l_{ik})}^{(j^{sa}+j_{sa}-j_{ik}-l_{ik})} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}$$

$$\sum_{n_{is}=n_{ik}+j_{ik}-\mathbf{l}_s-\mathbb{k}_1}^{(n_i-j_{ik}-1)!} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - j_{ik} - \mathbf{l}_s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$> n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge k = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{s=1}^{\infty} \sum_{(j_s=j_{ik}, l_s-l_{ik})}^{\left(\begin{array}{c} \\ \end{array}\right)} \\
 &\quad \sum_{j^{sa}+j_{sa}^{ik}-s}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{(j_i+j_{sa}-s)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{k-s}^{\left(\begin{array}{c} \\ \end{array}\right)} \\
 &\quad \sum_{n_i=n+k}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{(n_{ik}-s+\mathbb{k}-j_s+s)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_k=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{\left(\begin{array}{c} \\ \end{array}\right)} \\
 &\quad \sum_{(n_{ik}-s-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left(\begin{array}{c} \\ \end{array}\right)} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(s - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} .
 \end{aligned}$$

gündemi

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\mathbf{l}_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\mathbf{l}_{ik}} \sum_{(j^{sa}=j_{sa}+1)}^{(\mathbf{l}_{sa})} \sum_{j_i=\ell_{ik}+j_{sa}^{ik}-s+1}^{\mathbf{l}_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+j_{ik}-s+1}^{n_{is}+j_s-\mathbb{k}_1}$$

$$(n_{ik}+j_{ik}-j^{sa}+1) \dots n_{sa}+j^{sa}-j_i-$$

$$(n_{sa}+j^{sa}-n_{ik}-j_{ik}-1) \dots n_{is}-j_i+1$$

$$-n_{is}-1)! \dots -n_{is}-j_s+1)! .$$

$$(n_{is}-n_{ik}-\mathbb{k}_1-1)! .$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} .$$

$$(j_{ik}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})! .$$

$$(n_{sa}-n_s-\mathbb{k}_3-1)! .$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_{ik}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} .$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} .$$

$$\frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!} .$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} .$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} .$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\begin{aligned}
 & \sum_{k=1}^{\binom{n}{l_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{l_s}{l_{ik}}} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{l_{ik}+j_{sa}^{ik}-s}{l_{ik}}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{n_i-j_s+1}{n_i-k_1}} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-s} \\
 & \sum_{n_i=n+k}^{\binom{n_i-j_s+1}{n_i-k_1}} \sum_{(n_{is}=n+k-j_s+1)}^{\binom{n_i-k_1}{n_i-k_1}} n_{ik}=n_{is}+j_{ik}-k_1 \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-1)}^{\binom{n_i-j_s+1}{n_i-k_1}} n_s=n_{sa}+j^{sa}-j_i \\
 & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - l_{ik} - k_1 - k_2 - l_s)!}{(n_i - n - k_1 - k_2 - l_s)! \cdot (n + j_{sa} - j^{sa} - s - j_{sa})!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq n + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k_1 \neq 0 \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\therefore z = 2 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{n}{l_s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{l_s}{l_{ik}}}$$

$$\sum_{j_{ik}=j_{sa}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_s+s-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-s+1)!}.$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{is}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_i+j^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}.$$

$$(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!$$

$$\frac{-}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} +$$

$$\sum_{k=1}^{\left(\right. \left.\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{sa})} \sum_{j_i=l_s+s}^{l_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} + n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_j - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - n_s + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{\mathbf{D}}{s}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\binom{\mathbf{D}}{s}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{\mathbf{D}}{s}} \sum_{j_i=s+1}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \bullet l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{ik}+j_{sa}^{ik}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 1)!}{(l_s - j_s) \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j_{sa} + j_{sa}^{ik} - l_{ik} - s)!}.$$

$$\dots \frac{(l_i + j_i - l_{sa} - s)!}{(j^{sa} + l_i - l_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik}} \sum_{(j^{sa} = l_{ik} + j_{sa}^{ik} - s + 1)}^{(l_{sa})} \sum_{j_i = j^{sa} + s - j_{sa}}^{l_i}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa})!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_i - s)!}.$$

$$\frac{(D - l_i)!}{(n - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{j_{ik}=j^{sa}}^n \sum_{(j_{sa}=j_{sa}+1)}^{l_{ik}+j_{sa}^{ik}-s} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_{ik}+j_{sa}^{ik}-s}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}+j_{sa}^{ik}-s}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j_{sa}, j_i} &= \sum_{k=1}^{l_i} \sum_{(j_s=j_{ik})} \sum_{(j_{sa}=j_{ik})} \sum_{(j_{sa}=j_{ik}-1)} \dots \\
 &\quad \sum_{n_i=j_{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{n_{ik}=n+\mathbb{k}_2+j_{ik}-j_{ik}+1}^{l_i} \\
 &\quad \sum_{n_{is}=n+\mathbb{k}_1+j_{sa}-j_{sa}+1}^n \sum_{n_{ik}=\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 &\quad \sum_{(n_{ik}+j_{sa}-j_{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{sa}-j_{sa}-\mathbb{k}_1)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j_{sa} - \mathbf{l}_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.
 \end{aligned}$$

gündün

YAF

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\binom{\mathbf{l}_i}{\mathbf{l}_i}} \sum_{\substack{j_s = j_{ik} + l_s - l_{ik} \\ j_{ik} = j_{sa} + 1}}^{\binom{\mathbf{l}_i}{\mathbf{l}_i}} \frac{\sum_{\substack{l_s + j_{sa}^{ik} - 1 \\ j_{sa} = l_s + j_{ik} - l_{sa}}}^{\binom{\mathbf{l}_{sa}}{\mathbf{l}_{sa}}} \sum_{\substack{n_i - j_s + 1 \\ n_{ik} = n_{is} + j_{ik} - j_{sa}}}^{\binom{n_i - j_s + 1}{n_{ik}}} \sum_{\substack{n_{is} + j_s - j_{ik} - 1 \\ (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{is} - n + \mathbb{k}_3 - j_{ik} - 1)}}^{\binom{n_{is} - n + \mathbb{k}_3 - j_{ik} - 1}{n_{is} - n - j_i + 1}} \sum_{\substack{(n_i - n_{is} - 1)! \\ (j_s - j_i - 1)! \cdot (n_i - n_{is} - j_s + 1)!}}^{\binom{(n_i - n_{is} - 1)!}{(j_s - j_i - 1)! \cdot (n_i - n_{is} - j_s + 1)!}} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\begin{aligned}
 & \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=j_{sa}+1)}^{\infty} \sum_{j_i=j^{sa}+s-j}^{\infty} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{\infty} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_1-\mathbb{k}_3)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\infty} \\
 & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!} \cdot \\
 & \frac{(l_s - 2)!}{(\mathbb{k}_1 - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq n + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j_{ik} \leq j_i + j_{sa} - s \wedge j_{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = 1 \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\infty}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (j_s+n_i-n_{is}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)! \cdot (j^{sa}+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_s+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{\left(\right.\left.\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right.\left.\right)} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right.\left.\right)} \sum_{j_i=j^{sa}+s-j_{sa}}
\end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{( )}$$

$$(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 1)!}{(l_s - 1)! \cdot (l_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - i > l_{ik} \wedge l_{sa} + j_{sa}^{ik} - s > \dots \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^l\}$$

$$s \geq 6 \wedge s = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{+ j_i - j_s - 1 \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{z})!}{- j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{+ l_{sa} \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} - \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right.\left.\right)} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\left(\right.\left.\right)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\left(\right.\left.\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\left(\right.\left.\right)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^n$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right.\left.\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left(\right.\left.\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{n} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - 1)!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j_{sa}^{ik} + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(l_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{n} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge k = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& C_{i_{ik}, j_{sa}, j_{ik}} = \sum_{i=1}^{l_s} \sum_{(j_s=2)}^{l_s} \\
& \sum_{i_{ik}=j_s+l_{ik}-l_s}^{i_{ik}} \sum_{(j_{sa}=i_{ik}+j_{sa}-j_{sa})}^{(j_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{i_i} \\
& \sum_{\substack{(n_i-j_s) \\ (n_{is}=n+k-j_s+1)}}^{(n_i-j_s)} \sum_{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ (n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=n-j_i+1}}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

**gündün**

**YAF**

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{\substack{j_{ik}=j_s+l_{ik}-l_{sa} \\ j_{sa}=j_{ik}+j_{sa}-j_{ik}}} \sum_{\substack{j_i=j^{sa}+s-j_{sa} \\ n_i=n+\mathbb{k}_1 \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_{ik}=n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2}} \sum_{\substack{(n_i+j_{ik}+j_{sa}-j^{sa}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^{ik})! \\ (n_i-n_{ik}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)! \cdot (n+j_{ik}+j_{sa}-j^{sa}-s-j_{sa}^{ik})!}}$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\begin{aligned} & \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D - \mathbf{n} + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & \mathbf{l}_{ik} - j_{sa}^{ik} = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge \\ & D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\binom{n}{s}} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
&\quad \sum_{j_{ik}=j_{sa}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(j_i+j_{sa}-s)} \sum_{l_{ik}+s-j_s}^{l_{ik}} \\
&\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i-1)}^{(n_{is}+j_s-j_i-\mathbb{k}_1)} \\
&\quad \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{is} - n_i - \mathbb{k}_1 - 1)!}{(n_i - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
&\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
&\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
&\quad \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
&\quad \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
&\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
\end{aligned}$$

$$\sum_{k=1}^{\ell_{ik}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\ell_{ik}} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(\ell_{sa})} \sum_{j_i=l_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i-k_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n+\mathbb{k}_3-j_s+1}^{n_i+j_s-j_{ik}-\mathbb{k}_1}$$

$$(n_{ik}+j_{ik}-j^{sa})! \cdot (n_{sa}+j^{sa}-j_i-\mathbb{k}_3)!$$

$$(n_{sa}=n+\mathbb{k}_3-j_s+1) \quad n_s=n-j_i+\mathbb{k}_3$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}.$$

$$\frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\ell_{ik}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} - j_{sa} - j^{sa} - s - l_{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{n})!}{(D + j_{ik} - \mathbf{n} - l_i)! \cdot (\mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - j_{ik} \leq j_i + j_{sa} - s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - s > l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D + s - \mathbf{n} < l_i \leq D - \mathbf{n} + l_s + s - \mathbf{n} - 1 \wedge$$

$$D - \mathbf{n} < n \wedge \mathbf{n} - \mathbb{k} > 0$$

$$j_{sa} - j_{sa}^i - 1 \wedge j_{sa}^{ik} - j_{sa} - 1, j_{sa}^i < j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s$$

$$\mathbb{k}_z, z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_s+s-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{sa} + n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\left(\right.\left.\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\left.\right.\left.\right)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(\mathbf{l}_{sa})} \sum_{j_i=l_s+s}^n$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{-j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa}^{ik} - l_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(i_l + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{\binom{(\ )}{( )}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{(\ )}{( )}} \sum_{j_i=l_i+n-D}^{l_s+s-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\binom{(\ )}{( )}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\binom{(\ )}{( )}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{\mathbf{n}}{\mathbf{l}_i}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{\binom{\mathbf{n}}{\mathbf{l}_i}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n-D}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 1)!}{(l_s - j_s) \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - \mathbb{k}_2)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j_{sa} + j_{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - \mathbf{n} - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{\infty}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa}} \sum_{(j^{sa} = l_i + \mathbf{n} + j_{sa} - D - s)}^{(l_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + s - j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^n \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \mathbf{n} + \mathbb{k}_3 - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \mathbf{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - s)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - n_s - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - s - \mathbf{n} + s)!}.$$

$$\frac{(\mathbf{l}_s - l_i)!}{(l_s - n - \mathbf{n})! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{s=1}^{\mathbf{n}} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{i_k=j_{sa}^{ik}}^{l_{ik}} \sum_{(n_{sa} = n + \mathbb{k}_3 - j_{sa} + j_{sa}^{ik} + 1)}$$

$$\sum_{n+\mathbb{k}}^{n+\mathbb{k}} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\mathbf{k}=j^{sa}+j_{sa}^{ik}-s}^{\infty} \sum_{(j^{sa}=l_i+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\infty} \sum_{(j_{sa}=j_{ik}+l_s-j^{sa}-\mathbf{k}_1)}^{\infty}$$

$$\sum_{n+\mathbf{k} (n_{is}=n+j_{sa}-j_s+1)}^n \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbf{k}_1}^{\infty} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbf{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbf{k}_3}^{\infty}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3 - j_{sa}^{ik})!}{(\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D < \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbf{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\lfloor \frac{n}{l_s} \rfloor} \sum_{(j_s, j_{ik}, l_s, l_{ik})} \sum_{n_i=1}^{n-j_s} \\
 &\quad \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}, j_{ik}, n-D)} \sum_{j_i=l_i+n-D}^{j^{sa}+j_{sa}^{ik}-l_{ik}} \\
 &\quad \sum_{n_i=n-k_1}^{n} \sum_{(n_{is}=n+j_{ik}-k_1+1)} \sum_{n_{ik}=n_{is}-j_{ik}+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
 &\quad \sum_{(n_{sa}=n_{ik}-j^{sa}+1)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(n_i - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 &\quad \frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.
 \end{aligned}$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(\mathbf{l}_s+j_{sa}-1)} \sum_{j_{l_s}^{sa+s-j_{sa}}}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} n_{ik}=n+\mathbb{k}_2+j_{ik}-s+1$$

$$\frac{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa})!}{(n_{sa}+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{ik}-j_{sa}-1)!} \cdot$$

$$\frac{(n_{is}-n_i-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\left(\begin{array}{c} l_s \\ j_s = j_{ik} + l_s - l_{ik} \end{array}\right)} \sum_{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j_{sa}=l_s+j_{sa})}^{(l_{sa})} \sum_{j_i=j^{sa}+s-i}^n$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_i-k_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} j_i-k_1+1$$

$$(n_{ik}+j_{ik}-j^{sa}-n_{sa}+j^{sa}-j_i-\mathbb{k}_3) \\ (n_{sa}=n+\mathbb{k}_3-j_{sa}-1) \quad n_s=n-j_i+$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\begin{array}{c} l_i \\ j_s = j_{ik} + l_s - l_{ik} \end{array}\right)} \sum_{( )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa})!}$$

$$\frac{(l_s - 2)!}{(l_s - s)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s)!}{(D + j_s - \mathbf{n} - l_s)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa}^{ik} \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \geq l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D + s - \mathbf{n} < l_i \leq \dots + l_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge s - \mathbb{k} > 0 \wedge$$

$$j_{sa} - j_{sa}^{i} - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \leq j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_z = s - \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}+l_s-l_s)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa})} \sum_{j_i=l_i+n-D}^n$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} + n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_j - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa})! \cdot (j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\binom{n}{s}} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_s)}^{\binom{n}{s}}$$

$$\sum_{j_{ik}=\mathbf{l}_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\mathbf{l}_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{z})!}{(-j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} - l_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=l_i+\mathbf{n}+j_{sa}^{ik}-D-s}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\binom{(\ )}{( )}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{( )}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}+\mathbf{l}_s-\mathbf{l}_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(l_{sa})} \sum_{j_i=l_i+\mathbf{n}-D}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(l_s - 1)!}{(l_s - j_s) \cdot (j_s - 2)!}.$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j_{sa} + j_{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\infty} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{\infty}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+n-j_i-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_i - \mathbf{l}_{sa} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa})!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - \mathbf{l}_i - s)!}.$$

$$\frac{(D - l_i)!}{(n - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{s=1}^{\mathbb{k}_1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{\substack{j_{ik} = n + j_{sa} - j_{sa}^{ik} - 1 \\ j_{ik} \leq n + j_{sa}^{ik}}}^{\mathbb{k}_1} \sum_{\substack{( ) \\ j_{ik} + j_{sa} - j_{sa}^{ik} = n + j_{sa} - j_{sa}^{ik}}}^{\mathbb{k}_2} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{\substack{i=n+\mathbb{k}_1 \\ i=n+\mathbb{k}_2}}^n \sum_{\substack{(n_i-s+1) \\ (n_{is}=n+\mathbb{k}_2-j_s+1)}} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{( ) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
fzS_{j_s, j_{ik}, j_{sa}} &= \sum_{n=1}^{\min(l_i, l_s)} \sum_{(j_s=2)}^{(j_s=n-D)} \\
&\quad \sum_{j_{ik}=l_i+l_k-l_s}^{(n_l+1)} \sum_{j_{sa}=l_s+n-D}^{(n_s+1)} j_i=l_i+n-D \\
&\quad \sum_{n_i=\mathbb{k}_1}^n \sum_{(n_{is}=n+\mathbb{k}_1-1)}^{(n_l+1)} n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1 \\
&\quad \sum_{(j_{ik}=j_{sa}-\mathbb{k}_2)}^{(j_{ik}-j_{sa}-\mathbb{k}_3)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i-\mathbb{k}_3} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
&\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
&\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{\substack{k_1 = l_i + \mathbf{n} - s + 1 \\ i_s = l_i + \mathbf{n} - s + 1}}^{\mathbf{l}_{sa} - j_{sa}^{ik} + 1} \sum_{j_{ik} = j_s + l_{ik} - 1}^n \sum_{j_{sa} = j_{ik} + j_{sa} - j_{ik} + 1}^{j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \mathbf{n} + \mathbf{k}}^{\mathbf{l}_{sa} - j_{sa}^{ik} + 1} \sum_{\substack{(n_{ik} - 1) + \mathbf{k} - j_{ik} + 1 \\ n_{ik} = \mathbf{n} + \mathbf{k}_2 + \mathbf{k}_3 - j_{ik} + 1}}^{\mathbf{l}_{sa} - j_{sa}^{ik} + 1} \sum_{\substack{(n_{sa} - 1) + \mathbf{k} - j_{sa} + 1 \\ n_{sa} = \mathbf{n} + \mathbf{k}_2 + \mathbf{k}_3 - j_{sa} + 1}}^{n_{sa} + j^{sa} - j_i - \mathbf{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(j_s - j_i - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbf{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbf{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=l_i+n-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j^{sa}+s-j_{sa})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-\mathbb{k}_1}$$

$$\sum_{(j_{sa}=n_{ik}+j_{sa}-\mathbb{k}_2)} \sum_{(j_{sa}-\mathbb{k}_3)} \sum_{(j_i-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n - l_{ik} + j_{sa} - j^{sa} - s - j_{sa})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > \dots \wedge l_s \leq D - n \wedge \dots \wedge$$

$$1 \leq j_s \leq j_{ik} \wedge j_{sa}^{ik} + 1 \leq j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa} + j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < \dots < D + j_s + s - n - 1 \wedge$$

$$D < n < \dots \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\mathbf{(l}_i+\mathbf{n}-D-s)} \sum_{(j_s=2)}^{(\mathbf{l}_i+\mathbf{n}-D-s)}$$

$$\begin{aligned} & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{l_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa})} \sum_{j_i=l_i+n-D}^n \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{sa}=n+\mathbb{k}_3-j_i+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{n_s=n-j_l}^{n_{sa}+j_i-j_{ik}-\mathbb{k}_3} \\ & \frac{(n_i - n_s - 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1) \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ & \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot \end{aligned}$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\mathbf{(l}_s)} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)}^{(\mathbf{l}_s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{sa}+j^{sa}-j_i-1}$$

$$\frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}+1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (j_s+n_i-n_{is}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)}{(j^{sa}-j_{ik}+1)! \cdot (j^{sa}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_s+j^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=l_t+\mathbf{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{( )}^{( )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa})!}.$$

$$\frac{(l_s - 1)!}{(\ell_s - 1)! \cdot (s - 2)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - l_i) \cdot (n - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_{ik} - \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_i = l_{ik} \wedge \ell_s - j_{sa} - s = \dots \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: (j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^l)$$

$$s \geq 6 \wedge s = \dots \wedge \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=s+1}^{l_s+s-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_i - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l})!}{(j_s - 2)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_{sa} - j_{sa}^{ik} + 1)!}{(j_s + j_i - j_{ik} - \mathbf{l}_i)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(\mathbf{l}_s)} \sum_{(j_s=2)}^{(\mathbf{l}_s)}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{\mathbf{n}} \sum_{(j^{sa}=j_i+\mathbf{l}_{sa}-\mathbf{l}_i)}^{\mathbf{n}} \sum_{j_i=\mathbf{l}_s+s}^{\mathbf{l}_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - n_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\lfloor \frac{D}{2} \rfloor} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\lfloor \frac{D}{2} \rfloor}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\lfloor \frac{D}{2} \rfloor} \sum_{j_i=s+1}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_i-j_s+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\lfloor \frac{D}{2} \rfloor} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\lfloor \frac{D}{2} \rfloor}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge k = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\sum_{j_{ik} = j^{sa} + l_{ik} - 1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(i_s=2)}^{(j_{sa}-1)}$$

$$\sum_{\substack{j_{ik} = j^{sa} + l_{ik} - 1 \\ (n_{is} = n + k - j_s + 1)}}^{(j_{sa}-1)} \sum_{\substack{j_i = j^{sa} + l_i - l_{sa} \\ n_{ik} = n + k_2 + k_3 - j_{ik} + 1}}$$

$$\sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - k_2) \\ (n_{sa} = n + k_3 - j^{sa} + 1)}}^{n_{is} + j_s - j_{ik} - k_1} \sum_{\substack{n_{sa} + j^{sa} - j_i - k_3 \\ n_s = n - j_i + 1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=\Sigma^{l_s})}^{\left(l_s\right)} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\left(l_{sa}\right)} \sum_{(j^{sa}=l_s+j_{sa}-j_{ik}-l_{sa})}^{\left(n_{is}+j_s-j_{ik}-1\right)} \sum_{n_{ik}=n_{is}+\mathbb{k}_3-j_{ik}+1}^{\left(n_i-j_s+1\right)} \\ \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(n_{is}+j_s-j_{ik}-1\right)} \sum_{n_s=n-j_i+1}^{\left(j_i-\mathbb{k}_3\right)} \frac{(n_i - n_{is} - 1)!}{(j_s - \mathbb{k}_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\begin{aligned}
 & \sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_{sa}+1)}^{\infty} \sum_{j_i=j^{sa}+l_i-l_s}^{\infty} \\
 & \sum_{n_i=n+\mathbb{k}}^{\infty} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\infty} n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1 \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-1)}^{\infty} n_s=n_{sa}+j^{sa}-j_i \\
 & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2 - \mathbb{k}_1 - j_{sa})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - j_{sa})!} \cdot \\
 & \frac{(l_s - 2)!}{(\mathbf{n} - j_s) \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i) \cdot (\mathbf{n} - j_i)!}
 \end{aligned}$$

$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq \mathbf{n} + s - \mathbf{n} \wedge$   
 $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$   
 $j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$   
 $l_{ik} - j_{sa}^{ik} + 1 > \mathbf{n} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$   
 $D \geq \mathbf{n} < n \wedge I = \mathbb{k}_1 > 0 \wedge$   
 $j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$   
 $s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$   
 $s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$   
 $\mathbb{k}_1 \cdot z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

**giuldi**

$$\begin{aligned}
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_i+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!} \\
& \frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
& \frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=1}^{(\mathbf{l}_s)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=\mathbf{l}_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{z})!}{(-j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{z} - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{z} - j_{ik} - l_{sa})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(\ )}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\sum_{k=1}^{(\mathbf{l}_s)} \sum_{(j_s=j_{sa}+j_{sa}^{ik}-1)}^{(\mathbf{l}_s)} j_{ik}, j^{sa}, j_i = \sum_{k=1}^{(\mathbf{l}_s)} \sum_{(j_s=2)}$$

$$\sum_{k=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(\ )}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{i_k=j_s+j_{sa}^{ik}-1}^{\mathbf{l}_s} \sum_{j_s=2}^{l_s} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}^{l_s}$$

$$\sum_{i_k=j_s+j_{sa}^{ik}-1}^{n_i-\mathbb{k}_1-1} \sum_{j_s=2}^{j_{ik}+l_{sa}-\mathbf{l}_{ik}} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}^{l_s}$$

$$\sum_{i_k=n+\mathbb{k}_1}^{n+\mathbb{k}_2} \sum_{j_s=2}^{n_{is}=n+\mathbb{k}_2-j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(\mathbf{l}_s)}$$

$$\frac{(n_i + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{l}_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$> n > \mathbf{l}_i \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=1}^{l_i} \sum_{i=2}^{(l_k - j_{sa}^{ik} + 1)} \\
& \sum_{j_{ik}=j^{sa}}^{n_i} \sum_{(j^{sa}=j_i+l_s-j_i)}^{(j^{sa}=j_i+\mathbf{l}_s-\mathbf{n}-1)} \sum_{j_i=l_i+n-D}^1 \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n+\mathbb{k}-j_s+j_{ik})}^{(n_{ik}=n+\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)} \\
& \sum_{(n_{ik}=n+\mathbb{k}_1+\mathbb{k}_2-j_{sa}-\mathbb{k}_3)}^{(n_{ik}=n+\mathbb{k}_1+\mathbb{k}_2-j_{sa}+1)} \sum_{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{\infty} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\infty} \sum_{j_i=l_s+j_s}^{\infty} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j_i+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{n_s=n-j_i}^{n_{sa}+j_i-j_{ik}-\mathbb{k}_3} \\
& \frac{(n_i - n_s - 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \sum_{k=1}^{(l_s)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\infty} \sum_{j_i=l_i+n-D}^{l_s+s-1}
\end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 1)!}{(l_s - 1) \cdot (l_s - 2)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - l_i - l_s)! \cdot (\mathbf{n} - j_{sa}^{ik})!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{ik} \wedge$$

$$D + s - \mathbf{n} < l_i \leq D + l_s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^{i-1} < j_{sa} - 1 \wedge$$

$$s \in \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-1)} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(l_s+j_{sa}-1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{z})!}{(j_s - 2)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{z} - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{z} - j_{ik} - \mathbf{l}_i)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-l_{sa}}^{\mathbf{n}+j_{sa}-s} \sum_{(j^{sa}=\mathbf{l}_s+j_{sa})}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - n + j_{sa} - j_{sa} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\lfloor \frac{D}{l_s} \rfloor} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\lfloor \frac{D}{l_s} \rfloor}$$

$$\sum_{j_{ik}=j^{sa}+l_i-l_{sa}}^{l_s+j_{sa}-1} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{l_s+j_{sa}-1} j_i=j^{sa}+l_i-l_{sa}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_i-j_s+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\lfloor \frac{D}{l_s} \rfloor} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\lfloor \frac{D}{l_s} \rfloor}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& f_z S_{j_s, j_{sa}, j_i} = \sum_{k=1}^{i_{ik} - j_{sa}^{ik} + 1} \\
& \sum_{=l_i+n-k-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} .
\end{aligned}$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=1}^{(\mathbf{l}_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}}^{n+j_{sa}^{ik}-s} \sum_{j_{sa}=j_{ik}+l_{sa}-1}^{(n_l-k_1)+1} \sum_{i_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^{n_l} \sum_{(n_{ik}-\mathbb{k}-j_s+1)-\mathbb{k}_1=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}$$

$$(n_{ik}-\mathbb{k}-j^{sa}-\mathbb{k}_2), n_{sa}+j^{sa}-j_i-\mathbb{k}_3$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}+1)} n_s=n-j_i+1$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{l_s}{2}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{l_s}{2}}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j_s=j_{ik}+l_{sa}-l_{ik})}^{\binom{n_i-j_s+1}{2}} \sum_{j_i=j^{sa}+l_i-1}^{\binom{n_i-j_s+1}{2}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)}^{\binom{l_s}{2}} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)}^{\binom{l_s}{2}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq n - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j_i - s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + n - n < l_i \leq D - l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$6 \wedge s < s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{\binom{l_i+n-D-s}{2}}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \\
& \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_i+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=1}^{\sum_{(j_s=l_i+n-D-s+1)}^{(l_s)}} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\end{aligned}$$

g i u l d i

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{n_s}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1 - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3 - 1)!}.$$

$$\frac{(n_s - 1)!}{(j_t - j_i - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{l})!}{(-j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l} - j_{sa}^{ik} + 1)!}{(j_s + j_{sa}^{ik} - j_{ik} - \mathbf{l})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(\mathbf{l}_s)} \sum_{(j_s = \mathbf{l}_t + \mathbf{n} - D - s + 1)}^{(\mathbf{l}_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(\ )}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} \bullet 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{n} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+\mathbf{n}+s-D-j_{sa}}^{l_s+s-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_s - 1)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - l_i)!} +$$

$$\sum_{l_i=1}^{l_s} \sum_{(j_s=2)}^{(l_s)} \sum_{(j_{ik}=j^{sa}+l_{ik}-l_{sa})}^{(j^{sa}=j_l+l_{sa}-l_i)} \sum_{j_i=l_s+s}^n$$

$$\sum_{\mathbf{n}+\mathbb{k}}^{(n_i-j_s)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)} \sum_{n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{l_s^{ik}-1}} \sum_{\substack{j_s=j_{ik}-j_{sa}^{ik}+1 \\ (j_s=j_i+l_s-l_i)}}^{\binom{(\ )}{l_s^{ik}-1}} \sum_{\substack{n_i=n+\mathbb{k}(n_i-j_i)+1 \\ (n_i=j_i+l_s-j_{sa})}}^{\binom{(n_i-j_s+1)}{n_{ik}=j_i+j_s-j_{ik}-\mathbb{k}_1}} \sum_{\substack{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik}) \\ (n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik}-\mathbb{k}_2) \\ (n_{sa}=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}}^{\binom{(\ )}{n_{sa}+j_{sa}-j_i-\mathbb{k}_3}} \frac{(n_i + j_{ik} + j_{sa} - j_{sa}^{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i + j_{ik} + j_{sa} - j_{sa}^{ik} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_{ik} + j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} + j_{sa} - 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - 1 \leq \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_{ik}-\mathbb{k}_1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-\mathbb{k}_2-1)}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-\mathbb{k}_3}^{n_{sa}+j^{sa}-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_i - n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}} \sum_{(j^{sa}=\mathbf{l}_s+j_{sa})} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}^{(n+j_{sa}-s)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{is}-j_i+1}$$

$$\frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!}.$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (\mathbf{n}+\mathbb{k}_2+j_s-n_i-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (\mathbf{n}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-n_{isa}-1)! \cdot (\mathbf{n}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(\mathbf{n}_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{\binom{D}{2}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}} \sum_{(j^{sa}=\mathbf{l}_s+n-D)}^{(\mathbf{l}_s+j_{sa}-1)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\ \right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \\ \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \leq l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - \mathbb{k}_1 \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \dots$$

$$\mathbb{k} \cdot z = 3 \wedge z = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$$

$$fz^S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\ \right)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - n - \mathbf{n} - 1)!}{(n_s + \mathbf{n} - n - 1)! \cdot (n_s - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{n} - l_i)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - j_{sa} - j_{ik} + 1)!}{(j_s + l_{ik} - l_s - l_{sa})! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + \mathbf{n} - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{( )}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{\substack{j_{ik}=l_{sa}+j_{sa}^{ik}-D-j_{sa} \\ j_{ik}=l_{sa}+j_{sa}^{ik}-n+\mathbb{k}}}^{\mathbf{l}_s+j_{sa}^{ik}-1} \sum_{\substack{(j^{sa}-j_{ik}+l_{sa}-l_{ik}) \\ (n_{is}=n+\mathbb{k}-j_s+1)}}^{\mathbf{l}_s} \sum_{\substack{j_i=j^{sa}+l_i-l_{sa} \\ j_i=j^{sa}+l_i-\mathbb{k}_1}}^{\mathbf{l}_s} \sum_{\substack{(n_i-\mathbb{k}_1-1) \\ (n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}}^{\mathbf{l}_s}$$

$$\sum_{\substack{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_3)}}^{\mathbf{l}_s} \sum_{\substack{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}}^{\mathbf{l}_s}$$

$$\frac{(n_i + \mathbb{k}_1 + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n_{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, i_i} = \sum_{k=1}^{(l_{sa} + \mathbf{l}_s - D - j_{sa})}$$

$$\sum_{\substack{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa} \\ (n_{ik}+j_{ik}-j_{sa}^{ik}-l_{sa})}}^{n+j_{sa}^{ik}-s} \sum_{\substack{(n_{is}-n_{ik}-j_{ik}+l_{sa}) \\ (n_{is}=n+\mathbb{k}_1, n_{is}+1)}}^{\left(\begin{array}{c} n_i - j_s + 1 \\ n_{ik} \end{array}\right)} \sum_{\substack{n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ (n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}}^{n_i - j_s + l_i - l_{sa}}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2) \\ (n_{sa}=n+\mathbb{k}_3-j_{sa}^{ik}+1)}}^{n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}^{ik}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa}^{ik} - 1)! \cdot (n_{sa} + j_{sa}^{ik} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_{ls}=l_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+j_{ik}-1}^{n_{is}+j_s-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{(n_{sa}+j^{sa}-j_i-1)}^{(n_{sa}+j^{sa}-j_i-1)}$$

$$\frac{(n_{is}-n_s-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-s}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - l_{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_i) \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)}{(D + j_i) \cdot (\mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - s \leq l_{ik} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{i-1,sa} - s \wedge j^{sa} - s - j_{sa} - \mu \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - s = l_{ik} \wedge l_{i-1,sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - \mathbf{n} < l_{ik} \wedge D + l_s + j_{sa}^{ik} - s - 1$$

$$D < \mathbf{n} < n \wedge \mathbf{n} - \mathbb{k} > 0$$

$$j_{sa} - j_{sa}^i - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \wedge j_s < j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa} \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s - \mathbb{k} + \mathbb{k}$$

$$\mathbb{k}_z \cdot z = s \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_{ik}+s+n-D-j_{sa}^{ik}}^{( )} l_s+s-1$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j_{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_j - j_{ik} - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - n_s + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(\mathbf{l}_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\mathbf{l}_s)} \sum_{j_i=l_s+s}^{\mathbf{n}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - 1)!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s + \mathbf{n} - \mathbf{n} - 1)!}{(n_s + \mathbf{n} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - l_i)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s - l_i)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{n} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_{ik}+s+\mathbf{n}-D-j_{sa}^{ik}}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\left(\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& f_{2, \dots, i, j_{ik}, j^{sa}, j_{sa}} = \sum_{i=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(l_s + j_{sa}^{ik} - 1)} \\
& \sum_{i=n+\mathbb{k}}^{j_{ik}=j^{sa}-l_{sa}} \sum_{(j_{sa}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}
\end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{l_s} \binom{j_s}{j_{sa}^{ik}}$$

$$\sum_{\substack{j_{ik} = n + l_{ik} - l_{sa} \\ (n_{is} = n + \mathbb{k}_1 - 1) + 1}}^{n + j_{sa} - s} \binom{j_{ik} - j_s + 1}{j_{ik} - j_s - l_{sa}}$$

$$\sum_{\substack{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1 \\ (n_{ik} = n + \mathbb{k}_1 - 1) + 1}}^n \binom{n_{is} + j_s - j_{ik} - \mathbb{k}_1}{n_{ik} - j_s + 1}$$

$$\sum_{\substack{(n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1) \\ n_s = n - j_i + 1}}^{n_{sa} + j^{sa} - j_i - \mathbb{k}_3} \binom{n_{sa} + j^{sa} - j_i - \mathbb{k}_3}{n_s - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
 & \sum_{k=1}^{\binom{(\ )}{j_s=j_{ik}-j_{sa}^{ik}+1}} \sum_{\substack{(l_s+j_{sa}-1) \\ j_{ik}=j^{sa}+l_{ik}-l_{sa} \\ (j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}} \sum_{\substack{j_l=j^{sa}+l_i-l_{sa} \\ n_i=\mathbf{n}+\mathbb{k} \\ (n_{is}=\mathbf{n}+\mathbb{k}-s-1)}} \sum_{\substack{(n_i-j_s+1) \\ n_{ik}=n_{is}+j_s-j_{sa}^{ik}-\mathbb{k}_1}} \\
 & \sum_{\substack{(n_i+j_{ik}+j_{sa}-j^{sa}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^{ik})! \\ (n_i-\mathbf{n}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)! \cdot (\mathbf{n}-j_{ik}+j_{sa}-j^{sa}-s-j_{sa}^{ik})!}} \cdot \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \\
 & D \geq \mathbf{n} < n \wedge l_s > \mathbf{n} \wedge l_s \leq D - n \wedge \dots \wedge \\
 & 1 \leq j_s \leq j_{ik} \wedge j_{sa}^{ik} + 1 \leq j^{sa} + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\
 & j_{ik} + l_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\
 & l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge \\
 & D + j_{sa}^{ik} - \mathbf{n} - l_{sa} < D - l_s \wedge l_s + j_{sa}^{ik} - \mathbf{n} - 1 \wedge \\
 & D < \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge \\
 & j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\
 & \mathbf{s}: \{j_{sa}, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge \\
 & s \geq 6 \wedge s = s + \mathbb{k} \wedge \\
 & \mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow
 \end{aligned}$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left( j_{ik} - j_{sa}^{ik} + 1 \right)} \sum_{(j_s=2)}$$

$$\begin{aligned} & \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_i+1} \\ & \frac{(n_{ik}+j_{ik}-j^{sa})!}{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j_s-1)!} \cdot \frac{(n_i-n_{is}-1)!}{n_s=n-j_i+1} \\ & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\ & \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \\ & \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\ & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \cdot \\ & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\ & \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\ & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)} \end{aligned}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_j - j^{sa} - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - n_s + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{l_s}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{(\ )}{l_s}}$$

$$\sum_{j_{ik}=\mathbf{l}_{ik}+\mathbf{n}-D}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-\mathbf{l}_{ik})}^{\binom{(\ )}{l_s}} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}^{\binom{(\ )}{l_s}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\binom{(\ )}{l_s}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{(\ )}{l_s}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\binom{(\ )}{l_s}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - \mathbf{l}_i)!}.$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa}^{ik} - \mathbf{n} < \mathbf{l}_{ik} \leq D + \mathbf{l}_s + j_{sa}^{ik} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 1)!}{(l_s - j_{sa} - 1)! \cdot (\mathbf{n} - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - l_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{\mathbf{n}+j_{sa}^{ik}-s} \sum_{(j_s=l_{ik}+\mathbf{n}-D-j_{sa}^{ik}+1)}^{(l_s)}$$

$$\sum_{j_i=j_s+j_{sa}^{ik}-1}^{n+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{} \sum_{( )}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{\mathbf{l}_s} \sum_{l_{ik}=l_{ik}+n-D-j_{sa}^{ik}}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j_{sa}^{ik}+l_{sa}-l_{ik})}^{(j_s)} \sum_{j_i=j_s+j_{sa}-l_i-l_{sa}}$$

$$\sum_{n+\mathbb{k} (n_{is}=n+j_{sa}^{is}-j_s+1)}^n \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{-j_s+1) } \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2}^{n_{ik}-j_{sa}+j_{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa}^{ik} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(\mathbf{n}_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D > \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_s^{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{n_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 &\quad \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(j_i+j_{sa})} \sum_{i_s=j_i+1, j_s=s+1}^{l_s+s-1} \\
 &\quad \sum_{n_i=n+\mathbb{k} (n-i+1)}^{n} \sum_{n_{ik}=n-\mathbb{k}_2-\mathbb{k}_3-j_{ik}+1}^{(n_i-j_s+1)} \\
 &\quad \sum_{n_s=n-\mathbb{k}_3-j_i+1}^{n_{is}+j_s-j_{ik}} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 &\quad \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
 \end{aligned}$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{sa})} \sum_{(j^{sa}=j_{sa}+1)}^{l_i} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j_s+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{n_s=\mathbf{n}-j_i}^{n_{sa}+j_i-j_{ik}-\mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{ik} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \sum_{k=1}^{( )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}
\end{aligned}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\binom{n_i-j_s+1}{}} \sum_{j_i=s+1}^{l_s+s-1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{lk}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\binom{}{}} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{}{}} n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3 \\
 & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa})!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - \mathbf{j}_i) \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + j_{sa} - \mathbf{n} - l_i) \cdot (\mathbf{n} - j_i)!}
 \end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{i+k} - j_{sa} - s \wedge j^{sa} - j_s - j_{sa} - j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - 1 = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{I} > 0 \wedge$$

$$j_s < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{ \mathbb{c}, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_i \} \wedge$$

$$I \geq 6 \wedge I = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k}_1 = \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{l_s+s-1} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j_{sa})!} \cdot$$

$$\frac{(n_{sa} + n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - j_{is} - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{is} + j_i - n_{sa} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(\mathbf{l}_s)} \sum_{(j_s=2)}^{(\mathbf{l}_s)}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}} \sum_{(j^{sa}=\mathbf{l}_s+j_{sa})}^{(\mathbf{l}_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(j_i - j_s - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{z})!}{(j_s - 2)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{z} - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{z} - j_{ik} - \mathbf{l}_{sa})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{n}{2}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^n \sum_{(j^{sa}=j_{sa}+1)}^{(\mathbf{l}_s+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{n}{2}} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathfrak{l}_s - 2)!}{(\mathfrak{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - l_i)!}.$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \dots + \mathbb{k}_s \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{i_k=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i - 1)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s) \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s) \cdot (j_{ik} - j_s - j_{sa} - 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_{sa} - s) \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{i}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(\mathbf{l}_s)} \sum_{(j_s=2)}^{(\mathbf{l}_s)}$$

$$\sum_{i_k=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{l}_i - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{\substack{j_{ik}=j_{sa}^{ik}+1 \\ j^{sa}+l_{ik}-j_{ik}-l_{sa}-l_{ik}}}^{\mathbf{l}_s+j_{sa}^{ik}+1} \sum_{\substack{j_i=j^{sa}+s-j_{sa} \\ j_i=j^{sa}+s-j_{sa}}}^{\mathbf{l}_i+(n_i-s-1)} \sum_{\substack{j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1 \\ j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}}^{\mathbf{l}_i+(n_i-s-1)}$$

$$\sum_{\substack{j_{ik}=n+\mathbb{k} \\ (n_{is}=n+\mathbb{k}-j_s+1) \\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}}^{\mathbf{l}_s+(n_i-s-1)} \sum_{\substack{j_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}}^{\mathbf{l}_s+(n_i-s-1)} \sum_{\substack{j_i=j^{sa}+s-j_{sa} \\ j_i=j^{sa}+s-j_{sa}}}^{\mathbf{l}_i+(n_i-s-1)}$$

$$\frac{(\mathbf{n}_i + \mathbf{l}_i + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n_{is} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\mathbf{l}_i > 1 \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s > \mathbf{l}_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge k = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j_{ik}, j_{sa}, j_i} &= \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 &\quad \sum_{j_{ik}=j_s+j_{sa}^{ik}}^{l_{ik}} \sum_{j_{sa}=j_{ik}+l_{sa}-j_s}^{l_{sa}} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_{sa}} \\
 &\quad \sum_{n_i=n+k}^{n} \sum_{(n_{ik}=n+k-j_s-j_{ik}+1)}^{(n_{ik}+1)} \sum_{(n_{sa}=n+k_2+k_3-j_{ik}+1)}^{(n_{sa}+1)} \\
 &\quad \sum_{(n_{sa}=n-k_3-j_{sa}+1)}^{(n_{sa}+1)} \sum_{n_s=n-j_i+1}^{n} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
 &\quad \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\quad \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 &\quad \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \cdot
 \end{aligned}$$

gündemi

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\begin{aligned} & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^n \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_{ls}=j_{sa}^{sa}+s-j_{sa}}^{\left(\right)} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-\mathbb{k}_1}^{\left(\right)} \\ & \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-1)}^{\left(\right)} \sum_{(j^{sa}=\mathbb{k}_2+\mathbb{k}_3-s)}^{(n_{sa}-j_i-\mathbb{k}_3)} \\ & \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} - j_{ik} + j_{sa} - j^{sa} - s - j_{sa})!} \cdot \\ & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\ & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} \end{aligned}$$

$$\begin{aligned} & D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} - 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_i \leq j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge \\ & D + s - \mathbf{n} - 1 \leq D + j_i + s - \mathbf{n} - 1 \wedge \\ & D > \mathbf{n} \wedge I = \mathbb{k} > 0 \wedge \\ & j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \\ & s \cdot \{ j_{sa}, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i \} \wedge \end{aligned}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_s+s-1} \sum_{j_t=l_i+n}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_s-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$(n_{ik}+j_{ik}-j^{sa}) \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3) \\ (n_{sa}=n+\mathbb{k}_3-j_s+1) \quad n_s=n-j_i+\mathbb{k}_3$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!} \cdot$$

$$\frac{(n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^n \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(\mathbf{l}_{sa})} \sum_{j_i=\mathbf{l}_s+s}^n \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{si}=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdots + j_s-n_s-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{is}-n_{sa}-\mathbb{k}_3-1)!}{(j^{sa}-j_{sa}-1)! \cdot (\mathbf{n}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j_{sa}-1)! \cdot (n_s+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\
& \frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!} \cdot \\
& \frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
& \frac{(\mathbf{l}_i+j_{sa}-\mathbf{l}_{sa}-s)!}{(j^{sa}+\mathbf{l}_i-j_i-\mathbf{l}_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)! \cdot (\mathbf{n}-j_i)!} - \\
& \sum_{k=1}^{\left(\right.} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right.} \\
& \sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^n \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\left(\right.} \sum_{j_i=\mathbf{l}_i+\mathbf{n}-D}^{l_s+s-1}
\end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_s}^{( )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 1)!}{(l_s - 1) \cdot (l_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} - j_{sa}^{ik} - j_{sa}$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} - j_{sa} - s > 0 \wedge$$

$$D + s - n < l_i \leq D + l_s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^{i-1} < j_{sa} - 1 \wedge$$

$$s \in \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{i-1}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = \dots \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_i+n+j_{sa}-D-s-1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{n} \sum_{j_i=l_i+n-D}^{n}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_i - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{z})!}{(-j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_{sa} - j_{sa}^{ik} + 1)!}{(j_s + j_{sa} - j_{ik} - \mathbf{l}_{sa})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + j_{sa} - \mathbf{l}_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+\mathbf{l}_{ik}-\mathbf{l}_{sa}}^{(l_s+j_{sa}-1)} \sum_{(j^{sa}=\mathbf{l}_i+\mathbf{n}+j_{sa}-D-s)}^{(l_s+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\mathbf{n}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}_{sa}+j^{sa}-j_i-\mathbb{k}_3} \sum_{n_s=\mathbf{n}-j_i+1}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_i - \mathbb{k}_1)!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - n - \mathbf{n} - 1)!}{(n_s + \mathbf{n} - n - 1)! \cdot (n_s - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{n})! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - l_s - l_s)! \cdot (l_{ik} - j_s - j_{sa} + 1)!}.$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_i + j_{sa} - l_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_s+j_{sa})}^{(l_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^n$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa} - 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - \mathbf{l}_s + 1)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_{ik} - \mathbf{l}_s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\lfloor \frac{\mathbf{n}}{j_{ik}} \rfloor} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\lfloor \frac{\mathbf{n}}{j_{ik}} \rfloor}$$

$$\sum_{j_{ik}=j^{sa}}^{\lfloor \frac{\mathbf{n}}{j_{ik}} \rfloor} \sum_{(j_{sa}=\mathbf{l}_i+n+j_{sa}-D-s)}^{(\mathbf{l}_s+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_i-j_s+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\lfloor \frac{\mathbf{n}}{j_{ik}} \rfloor} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\lfloor \frac{\mathbf{n}}{j_{ik}} \rfloor}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j_{sa}+n-D}^{l_i+n+j_{sa}^{ik}-D-s} \sum_{j_i=l_i+n-D}^n \sum_{n_{is}=j_{ik}+l_{sa}-l_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=n+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ \sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \begin{cases} (j_{ik}-j_{sa}^{ik}+1) \\ (j_s=2) \end{cases}$$

$$\begin{cases} l_s+j_{sa}^{ik}-1 \\ l_{ik}=l_i+n+j_{sa}^{ik}-s \end{cases} \begin{cases} (n_{is}+j_{sa}^{ik}-1) \\ (n_{is}+j_{sa}^{ik}-1) \end{cases} \begin{cases} n \\ n \end{cases}$$

$$\sum_{n_{is}=\mathbf{n}+\mathbb{k}_1-\mathbb{k}_2+1}^n \begin{cases} (n_{is}+j_{sa}^{ik}-1) \\ (n_{is}+j_{sa}^{ik}-1) \end{cases} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \begin{cases} (n_{is}+j_{sa}^{ik}-1) \\ (n_{is}+j_{sa}^{ik}-1) \end{cases}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{l_s} \sum_{j_s=j_{sa}+k}^{(l_s)} \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{j^{sa}=j_{ik}+l_{sa}}^{( )} \sum_{n_i=j^{sa}-j_{sa}}^{n} \sum_{n_{is}+j_s-j_{ik}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+k_3-j_{ik}+1}^{n_i-j_s-k_2} \sum_{n_s=n-j_i+1}^{(n_i-n_{is}-1)} \sum_{n_{ik}-n_{sa}-k_1-1}^{(n_i-n_{sa}-1)!} \sum_{(j_s-j_i-1)! \cdot (n_i-n_{is}-j_s+1)!}^{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \sum_{n_{ik}-n_{sa}-j^{sa}}^{(n_{ik}-n_{sa}-j^{sa})!} \sum_{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-k_3)!}^{(n_{sa}-n_s-k_3-1)!} \sum_{(n_s-1)!}^{(n_s-1)!} \sum_{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}^{(\mathbf{l}_s-2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-1}^{\left(\right)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-\mathbb{k}_1}^{n_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\right)} \sum_{n_{sa}=n_{sa}+j^{sa}-j_i}^{n_{sa}-\mathbb{k}_2}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s + l_{sa} - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s + l_{sa} - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j_i - s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \geq l_{sa} + j_{sa}^{ik} - j_{sa} \wedge l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + \mathbf{n} - \mathbf{n} < l_i \leq D - l_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$6 \wedge s < s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_i + \mathbf{n} - D - s)} \sum_{(j_s=2)}^{\left(\right)}$$

$$\begin{aligned}
& \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=l_i+n-D}^n \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i-1}^{n_{sa}+j^{sa}-j_i-1} \\
& \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{is}-n_{sa}-\mathbb{k}_3-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{is}+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-n_{isa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
& \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
& \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
& \sum_{k=1}^{(l_s)} \sum_{(j_s=l_i+n-D-s+1)}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^n \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\left(\right)} \sum_{j_i=j^{sa}+s-j_{sa}}
\end{aligned}$$

**gündüz**

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j_{sa})!} \cdot$$

$$\frac{(n_{sa} + n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_j - j - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\sum_{(l_s)}} \sum_{(j_s=\mathbf{l}_i+\mathbf{n}-D-s+1)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{n} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{( ) \\ (n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}^{\substack{( ) \\ (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}} \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa}=j_i + l_{sa} - l_i)}^{\substack{( ) \\ (n_{is}=n+\mathbb{k}-j_s+1)}} \sum_{j_i=s+1}^{l_s+s-1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 1)!}{(l_s - j_{is})! \cdot (j_{is} - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(j_s + j_{sa} - l_{ik} - l_s)! \cdot (l_{ik} - j_s - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j^{sa} - l_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_{sa}+1}^{l_{ik}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\left(\right)} \sum_{j_i=l_s+s}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_i + \mathbf{l}_{sa} - j_{sa}} \sum_{(j^{sa} = j_i + \mathbf{l}_{sa} - \mathbf{l}_i)} \sum_{j_i = s+1}^{l_s + s - 1}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& fzS_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{(j_{sa} - j_{sa}^{ik} + 1)} \\
& \sum_{\substack{j_{ik} = j_{sa}^{ik} + 1 \\ (j_{sa} = j_{sa}^{ik})}}^{j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{l_i = l_{sa}}^{(l_s + j_{sa})} \\
& \sum_{n=k}^{n} \sum_{\substack{(n_{is} - j_s + 1) \\ (n_{is} = n + \mathbb{k}_1 - 1)}}^{n_{is}} \sum_{n_{ik} = n + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{\substack{(n_{ik} + j_{ik} - j_{sa} - \mathbb{k}_2) \\ (n_{sa} = n + \mathbb{k}_3 - j_{sa} + 1)}}^{n_{ik} + j_{sa} - j_{sa}} \sum_{n_s = n - j_i + 1}^{n_{sa} + j_{sa} - j_i - \mathbb{k}_3} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.
\end{aligned}$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{l_s} \sum_{j_s=2}^{l_s} \frac{(l_s)!}{(j_s - 1)! \cdot (l_s - j_s)!} \cdot$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}} \sum_{(j^{sa}=l_s+j_{sa}-j_{ik})}^{(l_{sa})} \frac{(l_{sa})!}{(j^{sa} - 1)! \cdot (l_{sa} - j^{sa})!} \cdot$$

$$\sum_{n_i=n+\mathbb{k}_3}^n \sum_{(n_{is}=n+\mathbb{k}_3-j_{ik}-\mathbb{k}_1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_i - n_i + 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - n_i + 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

gündemi

$$\sum_{k=1}^{\left(\right)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\left(\right)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\left(l_s+j_{sa}-1\right)} \sum_{(j^{sa}=j_{sa}+1)}^{\left(n_i-j_s+1\right)} \sum_{j_i=j^{sa}+l_i-l_s}^{\left(n_i-j_s+1\right)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{\left(n_i-j_s+1\right)} \sum_{n_{ik}=n_{is}-\mathbb{k}_1-j_{ik}-\mathbb{k}_1}^{\left(n_i-j_s+1\right)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_2-j_{sa})}^{\left(\right)} \sum_{n_{is}=n_{sa}+j^{sa}-j_i}^{\left(\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_2 - j_{sa})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_2)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - j_{sa})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D - j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_i \leq s + n - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j_{sa} - j_{sa}^{ik} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k}_1 > 0 \wedge$$

$$j_{sa} < j_{sa}^{i-1} - 1 \wedge j_{sa}^{ik} = j_{sa}^{i-1} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{i-1}, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \geq r + \mathbb{k} \wedge$$

$$\therefore z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\left(j_{ik}-j_{sa}^{ik}+1\right)} \sum_{(j_s=2)}^{\left(\right)}$$

**gündemi**

$$\begin{aligned}
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_i)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_1} \\
 & \frac{(n_i-1)!}{(j_s-2) \cdot (n_i-n_{is}-j_s+1)!} \\
 & \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1) \cdot (n_{ik}+j_{ik}-n_s-j_{ik}-\mathbb{k}_1)!} \\
 & \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j^{sa})!} \\
 & \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\
 & \frac{(l_s-2)!}{(l_s-j_s)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} + \\
 & \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}}
 \end{aligned}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j_{sa})!} \cdot$$

$$\frac{(n_{sa} + n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_{is} - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - \mathbf{n} + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(l_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_i)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{ik}+j_{ik}-j^{sa}-k_2)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_{sa}+j^{sa}-j_i-k_3}^{(n_{sa}+j^{sa}-j_i-k_3)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(j_s + j_{sa} - l_{ik} - l_s)! \cdot (l_{ik} - j_s - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}^{(\ )}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}, \dots, k_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$k_z: z = 3 \wedge k = k_1 + k_2 + k_3 \Rightarrow$$

$$f_{2, \dots, l_i, j_{ik}, j^{sa}, j_s} = \sum_{i=1}^{l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+k-n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_i+n-D}^{l_s+s-1}$$

$$\sum_{i=n+k}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2+k_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n+k_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-k_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - k_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - k_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{n} - l_i)! \cdot (n - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (n - l_i)!} +$$

$$\sum_{(j_s=2)}^{\sum_{(j_s=2)}^{(l_s)}} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{\substack{j_{ik}=l_{ik}+1 \\ n+\mathbb{k}(n_{is}=n+\mathbb{k}-j_s+1)}}^{l_{ik}} \sum_{\substack{(j^{sa}=j_i+l_{sa}-l_i) \\ n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}}^{(\ )} \sum_{j_i=l_s+s}^n$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{\substack{j_{ik}=j^{sa}+1 \\ j_{sa}=j_i+l_{sa}-1}}^{\infty} \sum_{\substack{j_{sa}=j_i+l_{sa}-1 \\ j_l=l_i+n-D}}^{\infty} \sum_{\substack{j_l=l_i+n-D \\ j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}}^{\infty}$$

$$\sum_{n_i=n+\mathbb{k}_1}^{\infty} \sum_{n_{ik}=n+\mathbb{k}_1-j_{ik}-\mathbb{k}_2}^{\infty} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\infty}$$

$$\sum_{(n_{sa}-n_{ik}+j_{sa}-s-\mathbb{k}_2)}^{\infty} n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3$$

$$\frac{(n_i + j_{ik} + j_{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} + \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\begin{aligned} & D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge \\ & 1 \leq j_{ik} - j_{sa} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge \\ & j_{ik} + j_{sa} - s - \mathbb{k}_2 \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge \\ & j_{sa}^{ik} - 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge \end{aligned}$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = & \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(l_s+j_{sa}-1)} \\
& \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-1)}^{(l_s+j_{sa}-1)} \cdots \sum_{(j_i=j_{sa}+j_{sa}-l_{sa})}^{(j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}(n_{sa}-j_{sa}+1)}^n \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_1+j_{sa}-j_{ik}+1}^{(n_i-j_s+1)} \sum_{n_{is}+j_s-j_{ik}}^{n_{is}+j_s-j_{ik}} \\
& \sum_{(n_{is}=n+\mathbb{k}_3-j_i+1)}^{(n_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{(n_{ik}-j_{ik}-\mathbb{k}_1-1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{l_s} \sum_{(j_s=2)}^{(l_s)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}} \sum_{(j^{sa}=l_s+j_{sa})}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n+\mathbb{k}_3-j_i+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{n_s=n-j_l}^{n_{sa}+j_i-j_{ik}-\mathbb{k}_3} \\
 & \frac{(n_i - n_s - 1)!}{(j_s - 2)! \cdot (n_i - n_s - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
 & \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
 \end{aligned}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_t+\mathbf{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_s+j_{sa}-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{ik})!}$$

$$\frac{(l_s - 2)!}{(l_s - j_s) \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i) \cdot (\mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{ik} \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_s > l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + s - \mathbf{n} < l_i \leq \dots + l_s + s - \mathbf{n} - 1 \wedge$$

$$D < \mathbf{n} < n \wedge s - \mathbb{k} > 0 \wedge$$

$$j_{sa} - j_{sa}^i - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 < j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa} \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_z = s - \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_i+\mathbf{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_t+\mathbf{n}+j_{sa}-D-s)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} + n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_j - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - n_s + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_t+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(j_l - j_i - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - \mathbf{z})!}{(-j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - l_{sa} - j_{sa}^{ik} + 1)!}{(j_s + l_{sa} - j_{ik} - l_{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(\mathbf{l}_s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}^{n_{ik}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) \\ (n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}}^{\mathbf{n}} \sum_{\substack{n_{sa}+j^{sa}-j_i-\mathbb{k}_3 \\ n_s=\mathbf{n}-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - 1)!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - n - \mathbf{n} - 1)!}{(n_s + \mathbf{n} - n - 1)! \cdot (n_s - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{n} - 2)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa}^{\text{ik}} + 1)!}{(j_s + l_{ik} - l_s - l_s) \cdot (j_{ik} - j_s - j_{sa}^{\text{ik}} + 1)!}.$$

$$\frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik}) \cdot (j^{sa} + j_{sa}^{\text{ik}} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{\text{ik}}+1)}^{\infty}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{\text{ik}}-D-s}^{l_s+j_{sa}^{\text{ik}}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{\text{ik}})}^{\infty} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}^{\infty}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_i-j_s+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\infty} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}^{\infty}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{\text{ik}})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{\text{ik}})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + s - \mathbf{n} < \mathbf{l}_i \leq D + \mathbf{l}_s + s - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} \bullet 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\}$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(\mathbf{l}_i + \mathbf{n} - D - s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{\mathbf{n}} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+j_{ik}-1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - \mathbf{n})!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(n - \mathbf{l}_i)! \cdot (n - j_i)!}.$$

$$k = j_s - i_s = l_i + n - D - s + 1$$

$$\sum_{\substack{j_{ik} \\ = j_s + j_{sa}}}^{\mathbf{l}_{ik}} \sum_{\substack{j_{sa} - s \\ = j_{ik} + j_{sa} - j_{sa}^{ik}}}^{\mathbf{0}} \sum_{\substack{j_i = j^{sa} + \mathbf{l}_i - \mathbf{l}_{sa} \\ n + \mathbb{k} (n_{is} = n + \mathbb{k} - j_s + 1)}}^{} \sum_{\substack{j_{ik} = \mathbf{n} + \mathbb{k}_2 + \mathbb{k}_3 - j_{ik} + 1 \\ n_{is} + j_s - j_{ik} - \mathbb{k}_1}}$$

$$\sum_{\substack{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \\ (n_{sa} = n + \mathbb{k}_3 - j^{sa} + 1)}}^{\mathbf{n}_i - j_s + 1} \sum_{\substack{n_{sa} + j^{sa} - j_i - \mathbb{k}_3 \\ n_s = n - j_i + 1}}^{\mathbf{n}_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - \mathbf{l}_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{\mathbf{k}_1 \leq j_s = l_i + \mathbf{n} - D - s}^{\mathbf{l}_s}$$

$$\sum_{j_{ik} = j_s + j_{sa} - 1 \quad (j^{sa} = j_{ik} - j_{sa} - j_{sa}^{ik})}^{\mathbf{l}_i} \sum_{j_i = j_{ik} + l_i - l_{sa}}$$

$$\sum_{n+1 \quad (n_{is} = n + j_s + 1)}^{\mathbf{n}} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbf{k}_1}^{j_s + 1}$$

$$\sum_{n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbf{k}_2}^{n} \sum_{n_s = n_{sa} + j^{sa} - j_i - \mathbf{k}_3}^{j_s + 1}$$

$$\frac{(\mathbf{n}_i + j_{ik} + j_s - j^{sa} - s - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3 - j_{sa}^{ik})!}{(\mathbf{n}_i - \mathbf{n} - \mathbf{k}_1 - \mathbf{k}_2 - \mathbf{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$D > \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D + j_{sa} - \mathbf{n} < \mathbf{l}_{sa} \leq D + \mathbf{l}_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbf{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{j_{ik}-j_{sa}^{ik}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} \frac{\sum_{j_{ik}=l_{ik}+n-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa})}^{( )} l_{s+s-D}}{\sum_{n_i=n}^{n} \sum_{(n_{is}=n+i-1+1)}^{(i-1)} n_{ik}=n_{sa}+j_{sa}-j_i-\mathbb{k}_1} \\ \frac{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2) \cdot n_{sa}+j^{sa}-j_i-\mathbb{k}_3}{(n_{sa}=n_{sa}-j^{sa}+1) \cdot n_s=n-j_i+1} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \\ \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\ \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \\ \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \\ \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \\ \frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!} \\ \frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\ \frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(\mathbf{l}_s)} \sum_{(j_s=2)}^{(\mathbf{l}_s)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}} \sum_{(j_{sa}=j_i+l_{sa}-1)}^{\left(\right)} \sum_{j_i=l_s+s}^n$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_i-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}-1}^{n_{is}+j_s-\mathbb{k}_1}$$

$$\sum_{(n_{sa}+j^{sa}-j_i-1)}^{\left(n_{ik}+j_{ik}-j^{sa}-1\right)} \sum_{(n_{sa}+j^{sa}-j_i-1)}^{(n_{sa}+j^{sa}-j_i-1)}$$

$$\frac{(n_{is}-n_s-\mathbb{k}_1-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_i+n_j-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{is}-n_s-\mathbb{k}_1-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_i+n_j-n_{ik}-j_{ik}-\mathbb{k}_1)!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)! \cdot (j_s-2)!}.$$

$$\frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}.$$

$$\frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\infty}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\infty} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{\infty} \sum_{j_i=l_{sa}+n+s-D-i}^{l_s+s-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-\mathbb{k}_1-j_{ik}-\mathbb{k}_1}^{n_i-j_s+1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2-\mathbb{k}_2)}^{\infty} \sum_{n_{is}=n_{sa}+j^{sa}-j_i}^{(n_i-j_s+1)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_2 - j_{sa})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_2)! \cdot (n + l_{sa} + j_{sa} - j^{sa} - j_{sa})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 1 \wedge l_s \leq n - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq n^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa}^{ik} \leq j^{sa} \wedge j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_i - n < l_{sa} \leq n + l_s + j_{sa} - n - 1 \wedge$$

$$\geq n < n \wedge I = \mathbb{k} > 0$$

$$j_{sa} < j_{sa}^{i-1} - 1 \wedge j_{sa} < j_{sa}^s - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$> 6 \wedge s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\begin{aligned}
& \sum_{j_{ik}=\mathbf{l}_{ik}+\mathbf{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\mathbf{l}_{sa}+\mathbf{n}-D)}^{(\mathbf{l}_s+j_{sa}-1)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=j_i+1}^{n_{sa}+j^{sa}-j_i-1} \\
& \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_i+n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
& \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_{ik}+1)!\cdot(n_i+j_{ik}-n_{sa}-j^{sa})!} \\
& \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_s+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \\
& \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!} \cdot \\
& \frac{(\mathbf{l}_s-2)!}{(\mathbf{l}_s-j_s)!\cdot(j_s-2)!} \cdot \\
& \frac{(\mathbf{l}_{ik}-\mathbf{l}_s-j_{sa}^{ik}+1)!}{(j_s+\mathbf{l}_{ik}-j_{ik}-\mathbf{l}_s)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
& \frac{(\mathbf{l}_{sa}+j_{sa}^{ik}-\mathbf{l}_{ik}-j_{sa})!}{(j_{ik}+\mathbf{l}_{sa}-j^{sa}-\mathbf{l}_{ik})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
& \frac{(D-\mathbf{l}_i)!}{(D+j_i-\mathbf{n}-\mathbf{l}_i)!\cdot(\mathbf{n}-j_i)!} + \\
& \sum_{k=1}^{(\mathbf{l}_s)} \sum_{(j_s=2)}^{(l_s)} \\
& \sum_{j_{ik}=\mathbf{l}_{ik}+\mathbf{n}-D}^{\mathbf{l}_{ik}} \sum_{(j^{sa}=\mathbf{l}_s+j_{sa})}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}
\end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - j_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j^{sa} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} + n_s - 1)!}{(j_i - j_s - 1)! \cdot (n_{sa} + j^{sa} - n_j - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_i + j_i - n_s + 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s - \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{2}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\mathbf{l}_s + j_{sa} - 1)} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(\mathbf{l}_s + j_{sa} - 1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\left(\begin{array}{c} \\ \end{array}\right)} \sum_{n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s > 1 \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i - s \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa} - \mathbf{n} < l_{sa} \leq D + l_s + j_{sa} - \mathbf{n} - 1 \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - I \wedge j_{sa}^s < j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + 1 \wedge$$

$$\mathbb{k} \cdot z = 3 \wedge z = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{sa}+\mathbf{n}+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - 1)!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - n - \mathbf{n} - 1)!}{(n_s + \mathbf{n} - n - 1)! \cdot (n_s - j_i)!}.$$

$$\frac{(l_s - 2)!}{(l_s - \mathbf{l}_i)! \cdot (j_s - 2)!}.$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s - l_s) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik}) \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_s - 1)!}{(l_s - j_{is})! \cdot (\mathbf{n} - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(j_s + j_{sa} - l_{ik} - l_s)! \cdot (l_{ik} - j_s - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j^{sa} - l_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\mathbf{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-l_{sa}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i-\mathbb{k}_3}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_i)}$$

$$\sum_{(j_{ik} = l_{sa} + j_{sa}^{ik} - j_{sa} - 1)} \sum_{(j_{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})} \sum_{(j_i = j^{sa} + l_i - l_{sa})}$$

$$\sum_{(n_i = \mathbf{n} + \mathbb{k})} \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)} \sum_{(n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1)}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{(n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s > 1 \wedge \mathbf{l}_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
& f^z S_{j_s, j_{ik}, j^{sa}, j_i} \sum_{(j_s=2)} \sum_{(j_{ik}=l_{ik})} \sum_{(j^{sa}=n-D)} \sum_{(j_i=j^{sa}+l_i-l_{sa})} \\
& \sum_{(n_{is}=n+\mathbb{k}_1-1)} \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)} \sum_{(n_{sa}=n+\mathbb{k}_3-j^{sa}+1)} \sum_{(n_s=n-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(-1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(-1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 2)!}{(l_s - j_s)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=1}^{\mathbf{l}_{ik}} \sum_{l_{sa}+n-\mathbf{l}_s=j_{sa}+1}^{(\mathbf{l}_{ik}-\mathbf{l}_s)+1} \sum_{i_i=j^{sa}+\mathbf{l}_i-l_{sa}}^{(n+j_{sa}-s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\mathbf{l}_{ik}} \sum_{i_{ik}+j_{sa}-j_{ik}=n-\mathbf{k}_1}^{(n-j_s-s)} \sum_{i_i=j^{sa}+\mathbf{l}_i-l_{sa}}^{(n+j_{sa}-s)}$$

$$\sum_{n_i=n+\mathbf{k}}^{n_i=(n_{ik}+j_{sa}^{ik}+1)} \sum_{i_{ik}+j_{sa}-j_{ik}=\mathbf{k}_1}^{(n_{ik}+j_{sa}^{ik}+1)-\mathbf{k}_1} \sum_{i_i=n+\mathbf{k}_2+\mathbf{k}_3-j_{ik}+1}^{(n_{ik}+j_{sa}^{ik}+1)-\mathbf{k}_1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - \mathbf{k}_1 - 1)!}{(\mathbf{k} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbf{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbf{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(\mathbf{l}_{ik} - \mathbf{l}_s - j_{sa}^{ik} + 1)!}{(j_s + \mathbf{l}_{ik} - j_{ik} - \mathbf{l}_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_s)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}^{(l_s)} \\ \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa})}^{( )} \sum_{i^{sa} = j_{sa} + j_{sa}^{ik} - l_{sa}}^{( )} \\ \sum_{n_i = n + \mathbb{k} (n - j_{sa} + j_{sa}^{ik} - 1)}^n \sum_{n_{ik} = n_i + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s + 1)} \\ \sum_{(n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)}^{( )} \sum_{i = n_{sa} + j^{sa} - j_i - \mathbb{k}_3}^{( )} \\ \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - 1) \cdot (n + j_i + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_s - 2)!}{(\mathbf{l}_s - j_s)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq s + s - j_{sa} \wedge$$

$$1 \leq j_{sa} \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} + j_{sa} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{n}{2}} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=s}^{l_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-\mathbb{k}_1-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j_i+1}^{n_{ik}+j_{ik}-j^{sa}} \sum_{(n_{sa}+j^{sa}=n_i-\mathbb{k}_3)}^{(n_{sa}-j_i+1)}$$

$$\frac{(n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}.$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-n_i-\mathbb{k}_3-1)!}{(j_i-j_{sa}-1)!\cdot(n_i+n^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!}.$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-j^{sa}-l_{ik})!\cdot(j^{sa}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)!\cdot(\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{\binom{n}{2}} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{( )} \sum_{j_i=s}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{( )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} \wedge l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 - \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\ )} \sum_{j_i=s}^{l_{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(\mathbf{l}_{sa} + j_{sa}^{ik} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{\mathbb{k}_3} \binom{j_{sa}}{j_{ik}}$$

$$\sum_{\substack{j_{ik}=j_{sa}^{ik} \\ j_{ik} < j_{sa}}} \binom{j_{sa}}{j_{ik}} \sum_{j_i=s}^{\mathbf{n}}$$

$$\sum_{\substack{i=n+\mathbb{k}_1 \\ n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}}^n \sum_{j_i=s}^{\mathbf{n}}$$

$$\sum_{\substack{j_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ j_{sa}=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}} \binom{n_s}{j_{sa}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + j_s = \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=1)}^{\binom{(\ )}{( )}}$$

$$\begin{aligned} & \sum_{j_{ik}=j_{sa}^{ik}}^{\binom{(l_i+j_{sa}-s)}{(j^{sa}=j_{sa})}} \sum_{j_i=j^{sa}+l_i-l_s}^{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}} \\ & \quad \sum_{n_i=n+\mathbb{k}(n_{ik}-n_{sa}+\mathbb{k}_3-j_{ik}+1)}^{\binom{(n_i-j_{ik}-\mathbb{k}_1+1)}{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_3)}} \\ & \quad \sum_{j^{sa}+1}^{\binom{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}{(n_{sa}-j_i+1)}} \\ & \quad \frac{(n_l-n_{ik}-\mathbb{k}_1)}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \\ & \quad \frac{(n_l-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\ & \quad \frac{(n_{sa}-j_i-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \\ & \quad \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\ & \quad \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-j^{sa}-l_{ik})! \cdot (j^{sa}-j_{sa})!} \cdot \end{aligned}$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{\binom{(\ )}{( )}} \sum_{(j_s=1)}^{\binom{(\ )}{( )}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\binom{(\ )}{(j^{sa}=j_{sa})}} \sum_{j_i=s}^{\binom{(\ )}{(j_i=s)}}$$

$$\sum_{n_i=n+\mathbb{k}(n_{ik}-n_i-j_{ik}-\mathbb{k}_1+1)}^{\binom{(\ )}{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{} \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - l_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} \wedge l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 - \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=1)}^{} (l_{sa})$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(l_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(\mathbf{l}_{sa} + j_{sa}^{ik} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=1}^{\mathbf{n}} \binom{j_{ik}}{j_{sa}^{ik}}$$

$$\sum_{\substack{j_{ik}=j_{sa}^{ik} \\ j_{ik} \leq j_{sa}^{ik}}} \binom{j_{ik}}{j_{sa}^{ik}} \sum_{j_i=s}^{\mathbf{n}}$$

$$\sum_{i=n+\mathbb{k}}^n \sum_{\substack{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1) \\ n_{ik} \leq j_{ik}}}^{\mathbf{n}} \binom{n_{ik}}{j_{ik}} \sum_{j_i=s}^{\mathbf{n}}$$

$$\sum_{\substack{j_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ j_{sa} \leq j^{sa}}}^{\mathbf{n}} \binom{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}{j_{sa}} \sum_{\substack{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3) \\ n_s \leq j_{sa}}}^{\mathbf{n}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$\geq \mathbf{n} < n \wedge \mathbf{l}_s = 1 \wedge l_s \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} - s > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\begin{aligned} & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{\infty} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\ )} \sum_{j_i=s}^{l_i} \\ & \sum_{n_i=n+\mathbb{k}}^{\infty} \sum_{(n_{ik}=n_i-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \\ & \sum_{n_{ik}+j_{ik}-j_{sa}=\mathbb{k}_2}^{\infty} \sum_{(n_{sa}+j_{sa}-j_i=\mathbb{k}_3)}^{(n_{sa}+j_{sa}-\mathbb{k}_3+1)} \\ & \frac{(n_{ik}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \\ & \frac{(n_{sa}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\ & \frac{(n_{sa}-n_{sa}-\mathbb{k}_3-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \\ & \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \end{aligned}$$

$$\frac{(l_{ik}-j_{sa})!}{(l_{ik}-j_{ik})! \cdot (j_{ik}-j_{sa})!} \cdot$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\infty} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}^{l_i}$$

$$\sum_{n_i=n+\mathbb{k}}^{\infty} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} \wedge l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 - \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\ )} \sum_{j_i=s}^{l_{sa}+s-j_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_{ik} - j_{sa}^{ik})!}{(\mathbf{l}_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{\mathbb{k}_3} \binom{j_{ik}}{j_{sa}^{ik}}$$

$$\sum_{\substack{j_{ik}=j_{sa}^{ik} \\ j_{ik} \leq j_{sa}^{ik}}} \binom{j_{ik}}{j_{sa}^{ik}} \sum_{j_i=s}^{\mathbf{n}}$$

$$\sum_{\substack{i=n+\mathbb{k}_1 \\ n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}}^n \sum_{\substack{j_i=s \\ j_{ik}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}^{\mathbf{n}} \binom{j_i}{j_{ik}}$$

$$\sum_{\substack{j_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}}^{\mathbf{n}} \binom{j_{sa}}{j_{sa}^{ik}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^{ik} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$\geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} - s > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge l_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\begin{aligned} & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\ )} \sum_{j_i=s}^{l_{ik}+s-j_{sa}^{ik}} \\ & \sum_{n_i=n+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-l_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \\ & \sum_{j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \\ & \frac{(n_i-n_{ik}-\mathbb{k}_1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \\ & \frac{(n_i-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\ & \frac{(n_{sa}-j_i-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \\ & \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\ & \frac{(l_{ik}-j_{sa}^{ik})!}{(l_{ik}-j_{ik})! \cdot (j_{ik}-j_{sa}^{ik})!} \cdot \end{aligned}$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}^{(\ )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{( )}^{( )} (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - l_i)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} \wedge l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 - \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_{sa})}^{(l_i+j_{sa}-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(\mathbf{l}_{ik} - j_{sa}^{ik})!}{(\mathbf{l}_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\sum_{k=1}^{\mathbb{k}_3} \binom{j_{ik}}{j_{sa}^{ik}}$$

$$\sum_{\substack{j_{ik}=j_{sa}^{ik} \\ j_{ik} \leq j_{sa}^{ik}}} \binom{j_{ik}}{j_{sa}^{ik}} \sum_{j_i=s}^{\mathbf{n}}$$

$$\sum_{\substack{i=n+\mathbb{k}_1 \\ n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}}^n \sum_{\substack{j_i=s \\ j_{ik}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}^{\mathbf{n}} \binom{j_i}{j_{ik}}$$

$$\sum_{\substack{j_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}}^{\mathbf{n}} \binom{j_{sa}}{j_{sa}^{ik}} \cdot$$

$$\frac{(n_i + j_{ik} + j_{sa}^{ik} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbf{l}_i - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!} \cdot$$

$$\geq \mathbf{n} < n \wedge \mathbf{l}_s = 1 \wedge l_s \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} - s > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{(j_s=1)}^{(\ )}$$

$$\begin{aligned} & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_{sa})}^{(l_{sa})} \sum_{j_i=j^{sa}+l_i-l_s}^{(n_i-j_i-\mathbb{k}_1+1)} \\ & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-\mathbb{k}_2-\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_i-\mathbb{k}_1+1)} \\ & \sum_{n_{ik}+j_{ik}-j_{sa}=\mathbb{k}_2}^{n_i-j_{sa}+1} \sum_{n_{sa}+j^{sa}-j_i=\mathbb{k}_3}^{n-n_j+1} \\ & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ & \frac{(n_i - n_{sa} - 1)!}{(n^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_i - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \end{aligned}$$

$$\frac{(l_{ik} - j_{sa})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^n \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}^{( )}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} \wedge l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 - \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_{sa})}^{(l_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\ \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_{ik} - j_{sa}^{ik})!}{(\mathbf{l}_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}$$

$$\sum_{k=1}^{\mathbb{k}_3} \binom{j_{ik}}{j_{sa}^{ik}}$$

$$\sum_{\substack{j_{ik}=j_{sa}^{ik} \\ j_{ik} \leq j_{sa}^{ik}}} \binom{j_{ik}}{j_{sa}^{ik}} \sum_{j_i=s}^{\mathbf{n}}$$

$$\sum_{\substack{i=n+\mathbb{k}_1 \\ n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}}^n \sum_{j_i=s}^{\mathbf{n}}$$

$$\sum_{\substack{j_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3}} \binom{j_{sa}}{j_{sa}^{ik}} \sum_{j_i=s}^{\mathbf{n}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^{ik} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$\geq \mathbf{n} < \mathbf{l}_s = 1 \wedge \mathbf{l}_s \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} - s > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\begin{aligned} & \sum_{j_{ik}=j_{sa}^{ik}}^{l_i+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(\ )} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{sa}=n_i-j_{sa}-\mathbb{k}_3+1)}^{(n_i-j_{ik}-\mathbb{k}_3+1)} \\ & \sum_{j_{sa}=j_{sa}^{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{(j^{sa}=n-j_i+1)}^{(n_{sa}+j^{sa}-j_{sa}-\mathbb{k}_3)} \\ & \frac{(n_i - n_{ik} - \mathbb{k}_1)}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\ & \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\ & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\ & \frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{n} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}^{(\ )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{( )}^{( )} (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} \wedge l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 - \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{( )}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_{ik} - j_{sa}^{ik})!}{(\mathbf{l}_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=1}^{\mathbb{k}_3} \binom{j_{ik}}{j_{sa}^{ik}}$$

$$\sum_{\substack{j_{ik}=j_{sa}^{ik} \\ j_{ik} \in \mathbb{N}}} \binom{j_{ik}}{j_{sa}^{ik}} \sum_{j_i=s}^{\mathbf{n}}$$

$$\sum_{\substack{i=n+\mathbb{k}_1 \\ n_i = n_{sa} + j^{sa} - j_i - \mathbb{k}_3 + 1}}^n \sum_{\substack{j_i=s \\ j_i \in \mathbb{N}}}^{\mathbf{n}}$$

$$\sum_{\substack{j_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ j_{sa} \in \mathbb{N}}} \binom{j_{sa}}{j_{ik}} \sum_{\substack{(n_s = n_{sa} + j^{sa} - j_i - \mathbb{k}_3) \\ n_s \in \mathbb{N}}}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$\geq \mathbf{n} < n \wedge \mathbf{l}_s = 1 \wedge l_s \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} - s > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} = \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=j^{sa}+l_i-l_s}^{(\ )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-\mathbb{k}_1+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{j^{sa}+1}^{n_{ik}+j_{ik}-j_s-\mathbb{k}_2} \sum_{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_l-n_{ik}-\mathbb{k}_1)}{(j_{ik}-\mathbf{2})! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}.$$

$$\frac{(n_l-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!}.$$

$$\frac{(n_{sa}-j_s-\mathbb{k}_3-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!}.$$

$$\frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!}.$$

$$\frac{(l_{ik}-j_{sa})!}{(l_{ik}-j_{ik})! \cdot (j_{ik}-j_{sa})!}.$$

$$\frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} -$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}^{(\ )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{( )}^{( )} (n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} \wedge l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 - \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} (j^{sa}=j_{sa}) \sum_{j_i=s}^{(l_{sa})} \sum_{l_i}^{l_i}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}.$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!}.$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_{ik} - j_{sa}^{ik})!}{(\mathbf{l}_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{\substack{j_{ik}=j_{sa}^{ik} \\ j_{ik} \geq 1}} \sum_{\substack{(j_s=1) \\ (j_s=s)}} \sum_{\substack{j_l=s}}$$

$$\sum_{\substack{n_i=n+\mathbb{k} \\ n_i \leq n}} \sum_{\substack{(j^{sa}=j_{sa}) \\ (j^{sa}-j_{sa} \leq s)}}$$

$$\sum_{\substack{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa} \leq n_i}} \sum_{\substack{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3) \\ (n_s \leq n_i)}}$$

$$\frac{(n_i + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - j_{sa}^{ik} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{sa}^{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} &= \sum_{k=1}^{\infty} \sum_{(j_s=1)} \\
 &\quad \sum_{j_{ik}=j^{sa}+l_{ik}-i_{sa}}^{\left(l_{ik}+j_s-j_{sa}^{ik}\right)} \sum_{j_i=s}^{l_i} \\
 &\quad \sum_{n_{ik}=n_{sa}+j_i-k_1-k_2-k_3+1}^n \sum_{(n_i=j_{ik}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3+j_i-k_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3+k_1-k_2-k_3)} \\
 &\quad \frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(n_i-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \\
 &\quad \frac{(n_{ik}-n_{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\
 &\quad \frac{(n_{sa}-n_s-\mathbb{k}_3-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \\
 &\quad \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)!\cdot(\mathbf{n}-j_i)!} \cdot \\
 &\quad \frac{(l_{ik}-j_{sa}^{ik})!}{(l_{ik}-j_{ik})!\cdot(j_{ik}-j_{sa}^{ik})!} \cdot \\
 &\quad \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})!\cdot(j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 &\quad \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)!\cdot(\mathbf{n}-j_i)!} - \\
 &\quad \sum_{k=1}^{\infty} \sum_{(j_s=1)}
 \end{aligned}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+\mathbb{k}_2)}^{} \sum_{(n_s=n_{sa}+j_{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - l_i)!}$$

$$\frac{(-l_i)!}{(s - n + 1)! \cdot (n - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq D + s -$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge l_i + s - s > j_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^{i_1}, \dots, \mathbb{k}_1, j_{sa}^{i_k}, \mathbb{k}_2, \dots, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \dots \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \dots + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{l_i} \sum_{(j_s=1)}^{} \sum_{(j_{sa}+j_{sa}^{ik}-j_{sa})}^{l_{sa}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{\substack{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ n_{sa}=\mathbf{n}+\mathbb{k}_3-j^{sa}+1}}^{\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\substack{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3) \\ (n_s=n-j_i+1)}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}.$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - 1)!}$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j^{sa} - \mathbb{k}_3)!}$$

$$\frac{(n_s - n - 1)! \cdot (n - j_i)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_{ik} - j_{sa}^{ik})!}{(\mathbf{l}_{ik} - j_{sa}^{ik})! \cdot (\mathbf{n} - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_i + j_{sa} - \mathbf{l}_{sa} - s)!}{(j^{sa} + \mathbf{l}_i - j_i - \mathbf{l}_{sa})! \cdot (\mathbf{l}_i + j_{sa} - j^{sa} - s)!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\mathbf{n}} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\mathbf{n}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}^{(\ )}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{D} - \mathbf{l}_i)!}{(\mathbf{D} + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s = 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 3 \wedge k = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$\begin{aligned}
 & C_{i,k,j^{sa},j_{sa}} = \sum_{i=1}^{n_i} \sum_{(j_s=1)}^{i_k} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{\infty} \sum_{(j_{ik}+l_{sa}-j_{ik})}^{(j_{sa}+l_{sa}-j_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{i_k} \\
 & \sum_{n_i=n+k}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=n+\mathbb{k}_2+j_{ik}-1)}^{(n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_3-j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}.
 \end{aligned}$$

$$\begin{aligned}
& \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \sum_{k=1}^{(\ )} \sum_{(j_s=1)}^{(\ )} \\
& \sum_{j_{ik}=j_{sa}^{ik}}^{n} \sum_{(j_{sa}^{ik} \leq j_{sa})}^{(\ )} \sum_{j_i=s}^{(\ )} \\
& n_{l_i} + \mathbb{k} (n_{ik} = n_i - j_{ik} + 1) \\
& n_{sa} = n_{ik} + j_{sa} - j_{sa} - \mathbb{k}_2 - s - j_i - \mathbb{k}_3 \\
& (n_i + j_{ik} + j_{sa} - j_{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})! \\
& (n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n_i - j_{ik} + j_{sa} - j_{sa} - s - j_{sa}^{ik})! \\
& \frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}
\end{aligned}$$

$$D \geq \mathbf{n} < n \wedge l_s = 1 \wedge l_i \leq \mathbf{n} + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq \mathbf{n} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa}^{ik} - j_{sa} \leq j_{ik} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > 1 \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, \mathbb{k}_1, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-s)} \sum_{j_i=j^{sa}+\mathbf{l}_i-\mathbf{l}_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j_{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3+1)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - \mathbb{k}_3 + 1) \cdot (n_{sa} - n_s - j_i - \mathbb{k}_3)!} \cdot$$

$$\frac{(\mathbf{n}_s - 1)!}{(n_s - j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot$$

$$\frac{(l_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!} -$$

$$\sum_{k=1}^{\left(\right.} \sum_{(j_s=1)}^{\left.\right)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\left(\right.} \sum_{(j^{sa}=j_{sa})}^{\left.\right)} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{\left(\right.} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{\left.\right)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\left(\right.} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{\left.\right)}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s = 1 \wedge \mathbf{l}_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$\mathbf{l}_{ik} - j_{sa}^{ik} + 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

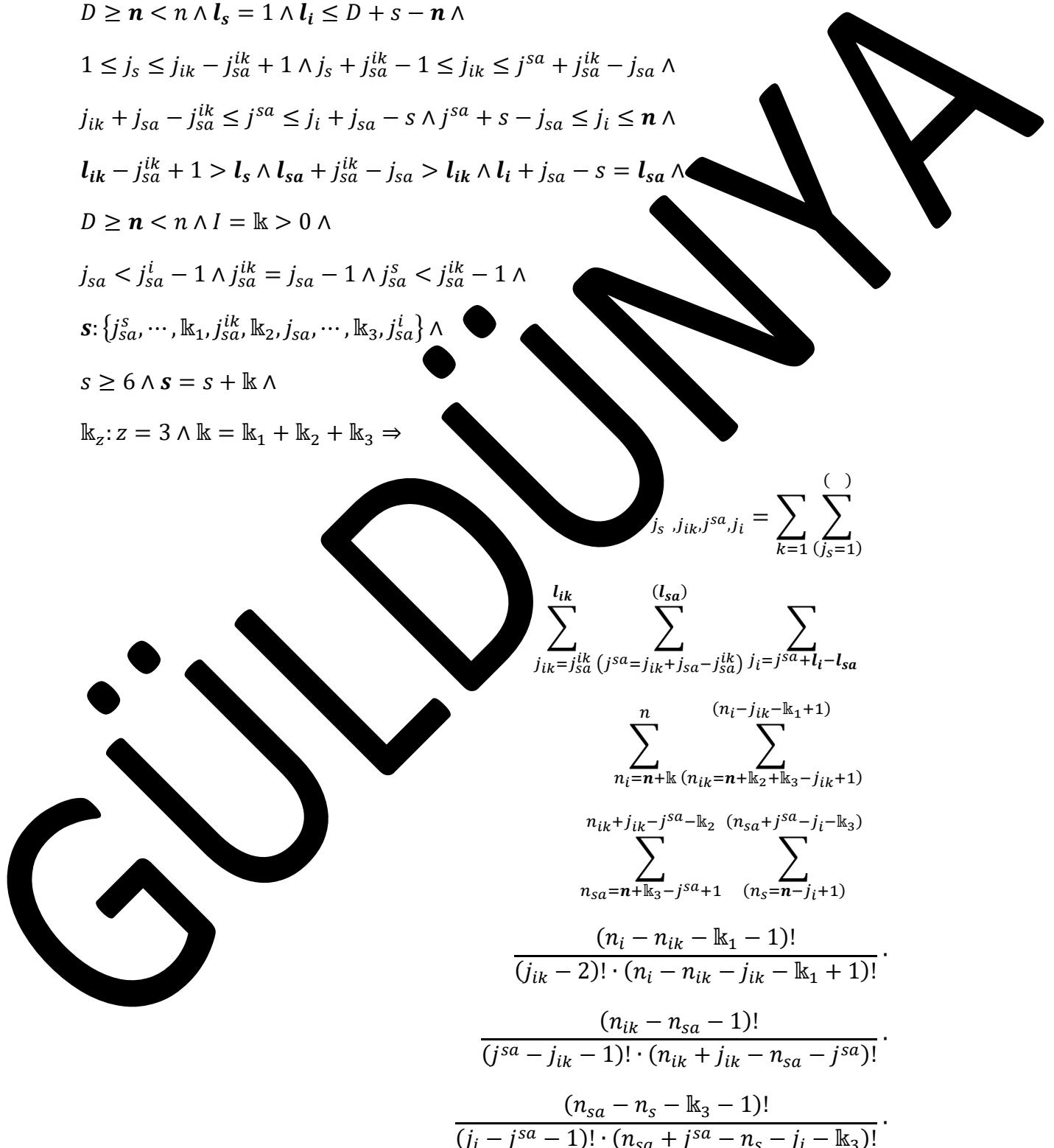
$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$



$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}.$$

$$\frac{(\mathbf{l}_{ik} - j_{sa}^{ik})!}{(\mathbf{l}_{ik} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!}.$$

$$\frac{(\mathbf{l}_{sa} + j_{sa}^{ik} - \mathbf{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbf{l}_{sa} - j^{sa} - \mathbf{l}_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}.$$

$$\frac{(D - \mathbf{l}_i)!}{(D + j_i - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - j_i)!}.$$

$$\sum_{k=1}^{\infty} \binom{(\ )}{j_{sa}^{ik}}$$

$$\sum_{i_{ik}=j_{sa}^{ik}}^{\infty} \binom{(\ )}{(j^{sa}-j_{sa})} \sum_{j_i=s}^{\infty}$$

$$\sum_{n=n+\mathbb{k}}^n \sum_{\substack{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}}^{\infty} \binom{(\ )}{(n_{sa}=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\sum_{\substack{(n_i+j_{ik}+j_{sa}-j^{sa}-s-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3-j_{sa}^{ik})! \\ (n_i-\mathbf{n}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3)! \cdot (\mathbf{n}+j_{ik}+j_{sa}-j^{sa}-s-j_{sa}^{ik})!}}^{\infty} \binom{(\ )}{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\frac{(D - \mathbf{l}_i)!}{(D + s - \mathbf{n} - \mathbf{l}_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge \mathbf{l}_s = 1 \wedge I \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_i < j_{ik} - j_{sa}^{ik} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$j_{sa} - j_{sa}^{ik} - 1 > \mathbf{l}_s \wedge \mathbf{l}_{sa} + j_{sa}^{ik} - j_{sa} > \mathbf{l}_{ik} \wedge \mathbf{l}_i + j_{sa} - s = \mathbf{l}_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 3 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\begin{aligned} & \sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\ )} \sum_{j_i=s}^{l_i} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2-\mathbb{k}_3=j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \\ & \sum_{j^{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2-\mathbb{k}_3} \sum_{(n_{sa}+j^{sa}-j_i=\mathbb{k}_3)}^{(n_i-j_i+1)} \\ & \frac{(n_i-n_{ik}-\mathbb{k}_1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot \\ & \frac{(n_i-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \\ & \frac{(n_{sa}-s-\mathbb{k}_3-1)!}{(j_i-s+1) \cdot (n_{sa}+j^{sa}-n_s-j_i-\mathbb{k}_3)!} \cdot \\ & \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \cdot \\ & \frac{(l_{ik}-j_{sa}^{ik})!}{(l_{ik}-j_{ik})! \cdot (j_{ik}-j_{sa}^{ik})!} \cdot \\ & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\ & \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} - \\ & \sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )} \end{aligned}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_1)}^{(\ )}$$

$$\frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}.$$

$$\frac{(D - l_i)}{(D + s - l_i - 1)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s = 1 \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + s \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa}^{ik} \leq j_i - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa} - j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \dots, \mathbb{k}_3, j_{sa}^i\} \wedge$$

$$s \geq 6 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 3 \wedge \mathbb{k} = \mathbb{k}_1 - \mathbb{k}_2 + \mathbb{k}_3 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^n \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\ )} \sum_{j_i=s}^{l_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2+\mathbb{k}_3-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_3-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}$$

$$\begin{aligned}
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - n_s - \mathbb{k}_3 - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(\mathcal{D} + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} - \\
& \sum_{k=1}^{\binom{\mathbf{n}}{s}} \sum_{(j_s=1)}^{\binom{\mathbf{n}}{s}} \\
& \sum_{j_{ik}=j_{sa}^{ik}}^{\binom{\mathbf{n}}{s}} \sum_{(j^{sa}=j_{sa})}^{\binom{\mathbf{n}}{s}} \sum_{j_i=s}^{\binom{\mathbf{n}}{s}} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{\binom{\mathbf{n}}{s}} \\
& \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\binom{\mathbf{n}}{s}} \sum_{(n_s=n_{sa}+j^{sa}-j_i-\mathbb{k}_3)}^{\binom{\mathbf{n}}{s}} \\
& \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3 - j_{sa}^{ik})!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - \mathbb{k}_3)! \cdot (\mathbf{n} + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!} \cdot \\
& \frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}
\end{aligned}$$

## DİZİN

### B

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumu simetrinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.1.1/3-4

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.2.1/3-4

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.1.1/3-4

ilk düzgün simetrik olasılık,  
2.3.2.1.1.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.3.1/3-4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumu simetrinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.1.1/153-154

ilk düzgün simetrik olasılık,  
2.3.2.1.1.1.1/162-163

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.1.1/210

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.1.2.1/153-154

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.2.1/162-163

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.2.1/210

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumu bağımlı simetrinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.2.1/153-154

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.3.1/162-163

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.3.1/210

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.4.1.1/3-4

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.4.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.4.2.1/3-4

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.4.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumu bağımlı simetrinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.1.4.3.1/3-4

ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.4.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumu

simetrinin son durumunun bulunabileceği olaylara göre

- ilk simetrik olasılık,  
2.3.2.1.1.1.1/156-157
- ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.1/165
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.1/215

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

- ilk simetrik olasılık,  
2.3.2.1.1.2.1/156-157
- ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.2.1/165
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.2.1/215

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre

- ilk simetrik olasılık,  
2.3.2.1.1.3.1/156-157
- ilk ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.3.1/165
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.3.1/215

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin son durumunun bulunabileceği olaylara göre

- ilk simetrik olasılık,  
2.3.2.1.1.6.1/3-4
- ilk düzgün simetrik olasılık,  
2.3.2.2.1.6.1/3-4
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.6.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

- ilk simetrik olasılık,  
2.3.2.1.1.6.2.1/3-4
- ilk düzgün simetrik olasılık,  
2.3.2.2.1.6.2.1/3-4
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu

bağımlı simetrinin son durumunun bulunabileceği olaylara göre

- ilk simetrik olasılık,  
2.3.2.1.1.6.3.1/3-4
- ilk düzgün simetrik olasılık,  
2.3.2.2.1.6.3.1/3-4
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.6.3.1/3-4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin durumuna bağlı

- ilk simetrik olasılık,  
2.3.2.1.1.1.1/7
- ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.1/6
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin durumuna bağlı

- ilk simetrik olasılık,  
2.3.2.1.1.2.1/77
- ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.2.1/61
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.2.1/106

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin durumuna bağlı

- ilk simetrik olasılık,  
2.3.2.1.1.3.1/77
- ilk ilk düzgün simetrik olasılık,  
2.3.2.2.1.1.3.1/61
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.3.1/106

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

- ilk simetrik olasılık,  
2.3.2.1.2.1.1.1/4
- ilk düzgün simetrik olasılık,  
2.3.2.2.2.1.1.1/3-4
- ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.1.2.1/4  
ilk düzgün simetrik olasılık,  
2.3.2.2.2.1.2.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.1.3.1/4  
ilk düzgün simetrik olasılık,  
2.3.2.2.2.1.3.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.2.1.1/5  
ilk düzgün simetrik olasılık,  
2.3.2.2.2.2.1.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.2.2.1/4  
ilk düzgün simetrik olasılık,  
2.3.2.2.2.2.1.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.2.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.2.3.1/4  
ilk düzgün simetrik olasılık,  
2.3.2.2.2.2.3.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.2.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.4.1.1/4  
ilk düzgün simetrik olasılık,  
2.3.2.2.2.4.1.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.4.2.1/4  
ilk düzgün simetrik olasılık,  
2.3.2.2.2.4.2.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.4.3.1/4  
ilk düzgün simetrik olasılık,  
2.3.2.2.2.4.3.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.6.1.1/4  
ilk düzgün simetrik olasılık,  
2.3.2.2.2.6.1.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.6.2.1/4  
ilk düzgün simetrik olasılık,  
2.3.2.2.2.6.2.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.6.3.1/4  
ilk düzgün simetrik olasılık,  
2.3.2.2.2.6.3.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.7.1.1/5  
ilk düzgün simetrik olasılık,  
2.3.2.2.2.7.1.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.7.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.7.2.1/5  
ilk düzgün simetrik olasılık,  
2.3.2.2.2.7.2.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.7.2/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.7.3.1/4  
ilk düzgün simetrik olasılık,  
2.3.2.2.2.7.3.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.2.7.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.3.1.1/4  
ilk düzgün simetrik olasılık,  
2.3.2.2.3.2.1.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.3.1.1/4-5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.3.1.2.1/4  
ilk düzgün simetrik olasılık,  
2.3.2.2.3.2.2.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.3.1.2.1/4-5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.3.1.3.1/4  
ilk düzgün simetrik olasılık,  
2.3.2.2.3.2.3.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.3.1.3.1/4-5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.2.2.1/5  
ilk düzgün simetrik olasılık,  
2.3.2.2.3.2.1.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.3.2.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.3.2.2.1/5  
ilk düzgün simetrik olasılık,  
2.3.2.2.3.2.2.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.3.2.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.3.2.3.1/4  
ilk düzgün simetrik olasılık,  
2.3.2.2.3.2.3.1/3-4  
ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.3.2.3.1/4-5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin herhangi iki durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.4.1.1.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.4.1.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.4.1.1.5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin herhangi iki durumuna bağlı ilk simetrik olasılık,  
2.3.2.1.4.1.2.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.4.1.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.4.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin herhangi iki durumuna bağlı ilk simetrik olasılık  
2.3.2.1.4.1.3.1/4

ilk düzgün simetrik olasılık,  
2.3.2.2.4.1.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.4.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk simetrik olasılık,  
2.3.2.1.4.1.1.1/701-702

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk durumunun bulunabileceği olaylara göre ilk simetrik olasılık,  
2.3.2.1.4.1.2.1/701-702

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk durumunun bulunabileceği olaylara göre ilk simetrik olasılık,  
2.3.2.1.4.1.3.1/701-702

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk simetrik olasılık,  
2.3.2.1.5.1.1.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.5.1.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.1.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk simetrik olasılık,  
2.3.2.1.5.1.2.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.5.1.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.1.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk simetrik olasılık  
2.3.2.1.5.1.3.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.5.1.3.1/4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.1.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk simetrik olasılık,  
2.3.2.1.5.2.1.1/6-7

ilk düzgün simetrik olasılık,  
2.3.2.2.5.2.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.2.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk simetrik olasılık,  
2.3.2.1.5.2.2.1/6-7

ilk düzgün simetrik olasılık,  
2.3.2.2.5.2.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.2.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre ilk simetrik olasılık,  
2.3.2.1.5.2.3.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.5.2.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.2.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı ilk simetrik olasılık, 2.3.2.1.8.1.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.1.1.1/5

dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı ilk simetrik olasılık, 2.3.2.1.8.1.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.1.2.1/5

dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı ilk simetrik olasılık, 2.3.2.1.8.1.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı ilk simetrik olasılık, 2.3.2.1.8.2.1.1/6-7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.2.1.1/6-7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı ilk simetrik olasılık, 2.3.2.1.8.2.2.1/6-7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.2.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.8.2.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık, 2.3.2.1.6.1.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.2.6.1.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.2.6.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık, 2.3.2.1.6.1.2.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.1.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık, 2.3.2.1.6.1.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.6.1.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık, 2.3.2.1.6.2.1.1/6

ilk düzgün simetrik olasılık, 2.3.2.2.6.2.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.2.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık, 2.3.2.1.6.2.2.1/6

ilk düzgün simetrik olasılık,  
2.3.2.2.6.2.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.2.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımlı simetrinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.2.3.1/4-5

ilk düzgün simetrik olasılık,  
2.3.2.2.6.2.3.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
simetrinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.4.1.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.6.4.1.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.4.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
bağımsız simetrinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.4.2.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.6.4.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.4.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
bağımlı simetrinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.4.3.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.6.4.3.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.4.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
simetrinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.6.1.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.6.1.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.6.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımsız simetrinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.6.2.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.6.6.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.6.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımlı simetrinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.6.3.1/5

ilk düzgün simetrik olasılık,  
2.3.2.2.6.3.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.6.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
simetrinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.7.1.1/6

ilk düzgün simetrik olasılık,  
2.3.2.2.6.7.1.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.7.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
bağımsız simetrinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.7.2.1/6

ilk düzgün simetrik olasılık,  
2.3.2.2.6.7.2.1/3-4

ilk düzgün olmayan simetrik  
olasılık, 2.3.2.3.6.7.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
bağımlı simetrinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.6.7.3.1/4-5

ilk düzgün simetrik olasılık,  
2.3.2.2.6.7.3.1/3-4  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.7.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.1.1.1/5  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.1.2.1/5  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.1.3.1/5  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.2.1.1/6  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.2.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.2.2.1/6  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.2.2.1/7

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

ilk simetrik olasılık,  
2.3.2.1.9.2.3.1/4-5  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.4.1.1/5  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.4.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.4.2.1/5  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.4.2.1/7

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

ilk simetrik olasılık,  
2.3.2.1.9.4.3.1/5  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.4.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.6.1.1/5  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.6.1.1/7

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

ilk simetrik olasılık,  
2.3.2.1.9.6.2.1/5  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.6.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.6.3.1/5  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.6.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.7.1.1/6  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.7.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.7.2.1/6  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.7.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık,  
2.3.2.1.9.7.3.1/4  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.7.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.7.1.1/5  
ilk düzgün simetrik olasılık,  
2.3.2.2.7.1.1/3-4  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.7.1.2.1/5  
ilk düzgün simetrik olasılık,  
2.3.2.2.7.1.2.1/3-4  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.1.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.7.1.3.1/5  
ilk düzgün simetrik olasılık,  
2.3.2.2.7.1.3.1/3-4  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.1.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.7.2.1.1/7  
ilk düzgün simetrik olasılık,  
2.3.2.2.7.2.1.1/3-4  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.2.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.7.2.2.1/7  
ilk düzgün simetrik olasılık,  
2.3.2.2.7.2.2.1/3-4  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.2.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,  
2.3.2.1.7.2.3.1/5  
ilk düzgün simetrik olasılık,  
2.3.2.2.7.2.3.1/3-4  
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.2.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,	2.3.2.1.7.4.1.1/5
ilk düzgün simetrik olasılık,	2.3.2.2.7.4.1.1/3-4
ilk düzgün olmayan simetrik olasılık,	2.3.2.3.7.4.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,	2.3.2.1.7.4.2.1/5
ilk düzgün simetrik olasılık,	2.3.2.2.7.4.2.1/3-4
ilk düzgün olmayan simetrik olasılık,	2.3.2.3.7.4.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,	2.3.2.1.7.4.3.1/5
ilk düzgün simetrik olasılık,	2.3.2.2.7.4.3.1/3-4
ilk düzgün olmayan simetrik olasılık,	2.3.2.3.7.4.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,	2.3.2.1.7.6.1.1/5
ilk düzgün simetrik olasılık,	2.3.2.2.7.6.1.1/3-4
ilk düzgün olmayan simetrik olasılık,	2.3.2.3.7.6.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,	2.3.2.1.7.6.2.1/5
ilk düzgün simetrik olasılık,	2.3.2.2.7.6.2.1/3-4
ilk düzgün olmayan simetrik olasılık,	2.3.2.3.7.6.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,	2.3.2.1.7.6.3.1/5
ilk düzgün simetrik olasılık,	2.3.2.2.7.6.3.1/3-4
ilk düzgün olmayan simetrik olasılık,	2.3.2.3.7.6.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,	2.3.2.1.7.7.1.1/7
ilk düzgün simetrik olasılık,	2.3.2.2.7.7.1.1/3-4
ilk düzgün olmayan simetrik olasılık,	2.3.2.3.7.7.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,	2.3.2.1.7.7.2.1/7
ilk düzgün simetrik olasılık,	2.3.2.2.7.7.2.1/3-4
ilk düzgün olmayan simetrik olasılık,	2.3.2.3.7.7.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık,	2.3.2.1.7.7.3.1/5
ilk düzgün simetrik olasılık,	2.3.2.2.7.7.3.1/3-4
ilk düzgün olmayan simetrik olasılık,	2.3.2.3.7.7.3.1/7

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

ilk simetrik olasılık,	2.3.2.1.10.1.1.1/5
ilk düzgün olmayan simetrik olasılık,	2.3.2.3.10.1.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.10.1.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.1.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.10.1.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.1.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.10.2.1.1/7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.2.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.10.2.2.1/7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.2.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.10.2.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.2.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.10.4.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.4.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.10.4.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.4.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.10.4.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.4.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.10.6.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.6.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.10.6.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.6.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.10.6.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.6.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

ilk simetrik olasılık,

2.3.2.1.10.7.1.1/7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.7.1.1/7-8

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

ilk simetrik olasılık,  
2.3.2.1.10.7.2.1/7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.7.2.1/7-8

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

ilk simetrik olasılık,  
2.3.2.1.10.7.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.7.3.1/5-6

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

ilk simetrik olasılık,  
2.3.2.1.11.1.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.1.1/6

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

ilk simetrik olasılık,  
2.3.2.1.11.1.2.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.1.2.1/6

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

ilk simetrik olasılık,  
2.3.2.1.11.1.3.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.1.3.1/6

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

ilk simetrik olasılık,  
2.3.2.1.11.2.1/8-9

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.2.1.1/9

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

ilk simetrik olasılık,  
2.3.2.1.11.2.2/1

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.2.2.1/9

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

ilk simetrik olasılık,  
2.3.2.1.11.2.3.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.2.3.1/6

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

ilk simetrik olasılık,  
2.3.2.1.11.4.1.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.4.1.1/9

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

ilk simetrik olasılık,  
2.3.2.1.11.4.2.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.4.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.11.4.3.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.4.3.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.11.6.1.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.6.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.11.6.2.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.6.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.11.6.3.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.6.3.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.11.7.1.1/8-9

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.7.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.11.7.2.1/8-9

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.7.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.11.7.3.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.7.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.11.7.4.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.7.4.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.11.7.5.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.7.5.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.11.7.6.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.7.6.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık,  
2.3.2.1.11.7.7.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.7.7.1/9

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 olan ve bağımlı olasılıklı dağılımin ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılığın, tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık kitabında, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılım ilk bağımlı durumu olan ve bağımlı olasılıklı dağılımin ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılığın, tanım ve eşitliklerini verilmektedir.

VDOİHİ’nin diğer ciltlerinde olduğu gibi bu ciltte verilen eşitlikler, olasılık tablolarından elde edilen verilerle üretilmiştir. Bu her eşitlikler ise ana eşitliklerden teorik yöntemle üretilmiştir. Eşitlik ve tanımların üretilmesinde dış kaynak kullanılmamıştır.

**GÜLDÜN**